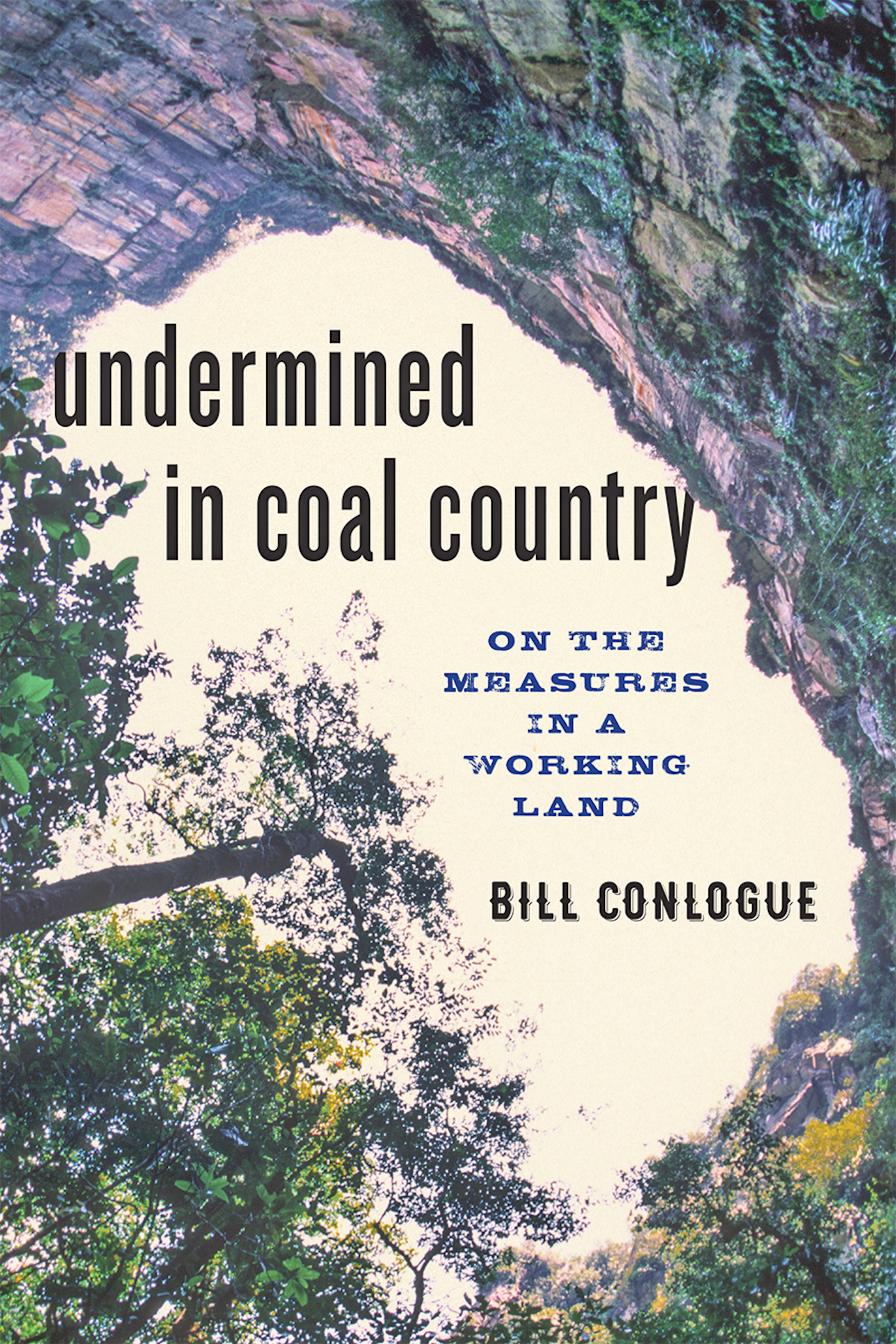

undermined in coal country

ON THE MEASURES IN A WORKING LAND

BILL CONLOGUE

VISIT…

LANZAROTE
Caliente.com

Undermined in Coal Country

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UNDERMINED IN COAL COUNTRY

On the Measures in a Working Land

Bill Conlogue

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The phrase “beyond the measure” is a
“Scranton term for living in territory not underlain by coal.”

William Fischel, *Regulatory Takings*

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Lines Composed below Scranton, on Revisiting the Mine Tour

Beneath McDade Park, I tramp with ten others through the Clark vein. Caged lights, which hang along the way, play with our shadows. Coal glistens, the gangway tracks glimmer. We stick close, in pairs and threesomes, alert, listening to the guide explain airflows, hand tools, and pay rates. Pausing at an aid station, he nods at Red Cross kits, stretchers, and bandages. Then he taps a clipboard nailed to a timber: the list of those last at work here.

We move on, deeper into the tunnel, which rises slightly, curves left, and ends. At this furthest remove from the mine car that brought us below, our guide gathers us at the face to teach us a lesson. Huddled around him, we wait. He smiles, reaches up, and snaps off the lights.

Water drips. A child whimpers, but no one speaks.

A wiseacre opens a cell phone, and I see a face, a smile. His friend cracks a joke about no service; someone groans. The guide flips a switch and, grinning, points the way out.

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Working the Face

Digging / in a world of shadows

Jay Parini, "Working the Face"

In the Lackawanna Valley, deep mining ended decades ago.

No one here digs in darkness to discover the distant past. No one chips at the face of the unknown to bring back light and heat. The mine barons who made fortunes have moved on, and most mining engineers have fled the region, gone to measure other places, other times. These days, low wages and high unemployment haunt the valley, and people who find themselves here wonder whether to remain or move on. An old story, this narrative of extraction. Dominated by boom-and-bust episodes, it speaks to far too many Americans in far too many places, areas as far flung as the Pacific Northwest, Gulf Coast shorelines, and the mountains of West Virginia.

In this book, I think about where I live and work. How did Scranton, Pennsylvania, and Marywood University cope with coal companies that undermined them? How did they respond to regional social and environmental upheaval? How did the school's liberal arts foundation speak to the local ethos of practical training? How does the literature that I teach help me to understand what I see and what I pass on?

I ask these questions as an imperfectly informed citizen of a twilit world. Whether I'm living in a morning or an evening twilight I can't quite tell. And I'm not alone. With the city officially distressed for more than twenty years, Scrantonians hope for a new dawn despite the deepening gloom of ever-fewer residents, ever-higher taxes, and ever-aging infrastructure.

But even gods dwell in twilight. Norse gods, who know evening twilight, acknowledge that chaos will eventually triumph.[1] To keep end times from overwhelming Asgard, their home, Thor wields a hammer, knowing that any defense is stopgap, ultimately futile. With patchwork his answer to disorder, his hammering away acts as a metaphor for art making.[2] To be a Norse hero, then, is to fight on—to create—despite knowing one's fate. I write in the same spirit: I'm trying to work through the fact that things fall apart.

I ask these questions too because long-buried histories threaten the present. For example, in 2012 the Environmental Protection Agency checked for lead contamination in soil surrounding St. Francis of Assisi Kitchen, which feeds the homeless and the working poor of Scranton. When the Diocese of Scranton bought the land in 1984, an environmental assessment focused only on "risks of mine subsidence, which turned out to be very low." Unfortunately, the diocese didn't recall that in 1960 a fire there had destroyed the Euston Lead Company, which had occupied the corner from 1914 until the late 1950s, years before the health effects of lead were widely known. In 2001, an environmental scientist unearthed this Euston history while studying 430 brownfields for possible health hazards. Preliminary investigations in 2006, thankfully, found no risk; for some reason, though, "the Diocese of Scranton was never told about the EPA's past or future evaluation of the site."[3]

■ ■ ■

I trace intersections among people, places, and texts. To discover how the world around me affects what I do, and how what I do affects the world, I ask how the places where I work shape the work that I do. I am aware, if often only dimly, that what I do responds, if only partially, to decisions of those who have come before me. The places where I work, Marywood and Scranton, and the texts that I study are more than physical; they are events. Where I am and the work that I do here also transcend this moment, this place: after all, I hope I've taught someone something.

To account for the depth and breadth of place, my narrative moves vertically, up and down, from surface to subsurface, from present to past and back, much as miners do every day. In reading the region horizontally, I interweave interrelated contexts, near and far. Each chapter embeds among many stories a story about the Anthracite Region and Marywood: coal, Catholicism, and fires, for example, help me to trace how these ideas connect me to other places, other ideas.

Contexts create meaning. A Middle English word, "context" comes from the Latin *contextus*, or connection, and from *contexere*, which means "to weave together."[4] Just as most natural fabrics are porous, so are texts; gaps define both. Just as tailors make holes to stitch patches, so writers space words to make sense. And just as gaps in fabrics give seamsters work to do, so gaps in texts give readers work to do, making them makers of meaning, not passive consumers of it. Interpretation, *Undermined in Coal Country* invites interpretation.

Stories are other places. Patches of meaning in an indifferent universe, they help me to make sense of my experience. Discovering how words interrelate and how sentences depend one on another teaches me to see interrelationships in the world. Each patch contributes to my reading of other patches, other places, including Marywood. I bring to campus my family history and the personal experiences that it shaped, which, along with my life as a reader, guide how I understand campus grounds.

I use the word “measures” in the title because its meanings touch time and space. Locally, “measure” means a seam of anthracite. In literary contexts, “measure” means meter, or a metrical foot (i.e., poetic rhythm), and it names the width of a printed page. “Measure” nods to governance—legislators pass measures to make laws—and the word describes a fixed or stable limit, amount, or degree. An estimate of what is to be expected of a person or situation, “measure” also means moderation, or temperance, and refers to a step planned or taken as a means to an end. A measure is a standard of comparison, and is about time in music and about movement in dance, as in “to tread a measure.” As an archaic verb, “to measure” is to travel over, to traverse.[5]

I like the word “working” because it also has senses of time and space. Used as a noun, working refers to a way of operating, an ache or pain, and a mining excavation. As an adjective, the word means to be employed, as in working writer; to facilitate further work, as in working draft; and to be in use, as in working mine.[6] In an active pit, a working place—or, working face—is the spot where coal is mined; working home means to remove coal from the face back to the shaft base.[7] Among miners, “working” also means the noise that a mine makes just before it collapses.[8] A working mine, then, is unstable; attentive miners hear it working before they see it come undone.

Within the Lackawanna Valley lay seven worked-over measures, stacked one on another. Understanding the horizontal and vertical contexts that extend in time and space across the valley requires a study of history and literature. In different ways, each records the lived experiences of people and places that are not only horizontally connected but also vertically intertwined. To ask how people, texts, and lands interrelate is to ask more-than-surface questions; any answers must be three—no—four dimensional.

A crossroads of conflict, Marywood not only wrestles with the narrative of extraction that defined Scranton, but it also struggles with that narrative’s subplots: deindustrialization, economic instability, and environmental damage. Founded in 1915 by women for women, Marywood confronted from the start male-dominated mining operations that pockmarked its campus with land subsidence and mine fires. This history, which upends pastoral images of college life, defined its mission, strained budgets, and delayed expansion. A physical expression of Marywood’s past, campus lands may look solid, but this surface rests atop a vast, hollowed-out world.

Writing about Marywood and mining argues that the past is present, that literature and history matter, and that education cannot be reduced to either training or schooling. The story that I tell is not a chronological narrative but a hybrid, a series of fragments that weave one version of the region's story. As much as soundings and borings discover measures of coal and rock beneath soil, so measuring out this story requires a toolkit of irony, indirection, and juxtaposition. Experiments, the narrative cores overlap at a literal and figurative location, the Marywood Learning Commons, a node of knowledge that replaced what was once the campus crux of learning, the library. Although I ask a lot of hard questions below, I come up with few easy answers.

To pose these questions, I lay out three threads: an exploration of Scranton's resource extraction history, readings of literary works that comment on this history, and Marywood's coping with its coal-mining past. Rather than offer thesis-driven descriptions, I take a less direct approach; different chapters highlight different threads. Some sections open with history and then move to literary works and the importance of the liberal arts, while others either start with literature or begin on campus. The threads run throughout, but their order and emphasis change. I invite you to interweave them because, for good or ill, more and more colleges and communities now directly depend on another boom-and-bust fossil fuel: natural gas. In 2009, for example, the University of Texas, Arlington, received its first royalty checks from six natural gas wells on its 420-acre campus, in the city's downtown. In 2014, West Virginia State University began drawing natural gas from three wells to supply its energy needs. Two years later, in 2016, the University of Wyoming attributed its financial crisis to a downturn in state production of coal, oil, and natural gas. With the president describing the United States as the "Saudi Arabia of natural gas," I wonder whether this latest extraction bonanza will leave legacies similar to those of anthracite coal mining.[9]

■ ■ ■

When students wonder aloud why they should read poems, I sometimes read them a poem.

Jay Parini's "Working the Face" is a narrative of extraction. Beginning in the middle of things, the poem describes a miner, alone, "on his belly," chipping at a narrow vein of coal (1).[10] He works like a plant, a living thing that draws sustenance from above and below. A "taproot / tunneling inward, layer / by layer" (10–12), the miner goes ever deeper, closer to essential meanings, eventually getting to the “end of it, / core and pith / of the world’s rock belly” (20–22). With “his nose / to the anthracite,” he comes face to face with hard truths, the implacable, indifferent earth (6–7). What he discovers he brings to the surface.

To read “Working the Face” is to remember other stories. Recalling the biblical Fall, the poem describes a man toiling alone at a dirty, demanding job, the Garden of Eden nowhere in sight. Alluding to Satan in *Paradise Lost* and to Hades, of classical mythology, the speaker calls the miner a “prince of darkness” (18) who “stalk[s] the village at 6 P.M.,” the hour of the Angelus, which commemorates the Incarnation, the union of natural and supernatural, concrete and abstract (19). Underscoring this interweaving, the miner, lying inside the mine like a “slug,” a “line of type cast as one piece,” is also an incarnation, of flesh made word, poetry (14).[11]

Guided by the light he carries, the miner gathers for the village sunlight in the form of anthracite. As he works, coal “facets” (16), diamond-like, “showered a million stars” (17), which remind one of infinite space beyond the mine, above the town. Signaling the poem’s move from subsurface to surface—and beyond—this turn of words leads to revelations, which they—miner and poet—proclaim to others. As the poem ends, the resurrected miner brings from the “world’s rock belly” (22), its womb, his news to the villagers about appearance and reality, life and death.

Buried in the poem’s final sentence, in the middle of line 19, the village, surface life, hears at the Angelus about “digging / in a world of shadows” (12–13), about the underworld, the dead. In line 20, the pronoun “it” provokes rereading. In a first reading, “it” refers back to the village in line 19; the comma that follows the pronoun, however, signals that the reader should seek the pronoun’s antecedent further on, in the “core and pith” of line 21. The instability of the referent unites below and above ground, now and then; however, “it” has no final referent because the poem never explicitly says what the miner tells the world. The truth he brings to the surface the poet leaves readers to discover in their own digging. At the same time that the poem reminds me that each of us faces suffering and death alone—“Only one at a time could get / so close” (5–6)—it teaches me that I am not the only one to face the pains and realities of living.

“Working the Face” is as much about writing poetry as it is about mining coal. Attending carefully to the poem offers us an imaginative leap into the life of another; this leap momentarily closes the gap that separates us, the living and the gone. Making such connections lights our way.

A poet, novelist, and biographer, Jay Parini, who teaches English at Middlebury College, knows something about hard coal: he grew up in Scranton, on the city's West Side. Appearing in *Anthracite Country* (1982), the poem contributes to the collection's creation of a sense of place, a sense of the lived experience that is Scranton. Absorbing this lived experience to enliven our own is reason enough to read poetry at Marywood.

NOTE

Undermined in Coal Country defends the study of history and literature. History tells stories about life in the past; literature expresses the experience of being alive. To study them is to know how the dead made life meaningful.

The dead are often our best, sometimes our only, guides.

Knowing other places helps me to know better—not completely, never completely—where I am and who I am. To know this place, I travel, I read, I come home.

I survey below the university where I work and the city where I live because they not only form frames of reference for me but also express environmental worries that trouble us all. No place is immune. After all, local history is national history.

If you wonder, why these literary pieces? my only answer is, why not? I could have chosen others, but these came to mind, maybe because they helped me to see something differently, maybe because I thought that they could help you to see something differently, or maybe because I liked them and hoped that you would too. In reading them closely, I practice paying attention.

If we are serious about solving environmental problems, if we are serious about knowing where we are and what happens there, we need to attend closely to all places, which is to attend to the world, an effort harder than it may seem, especially in a universe so cold, dark, and disorienting.

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My wife, Bridget Carter Conlogue, read drafts of the manuscript and patiently listened as I thought out loud about it.

I am responsible for all errors.

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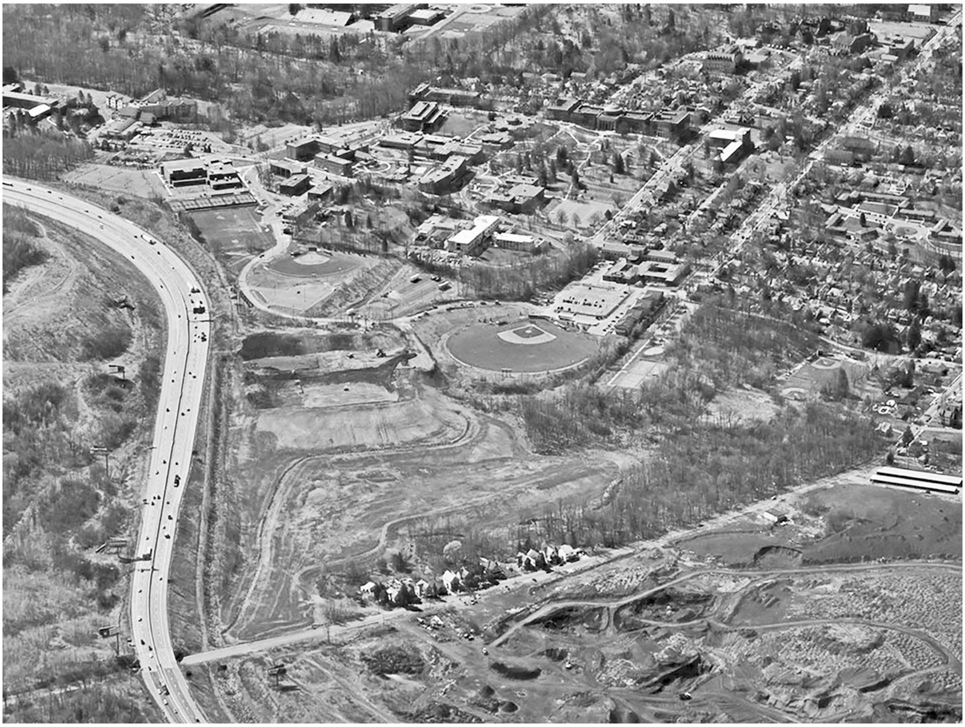
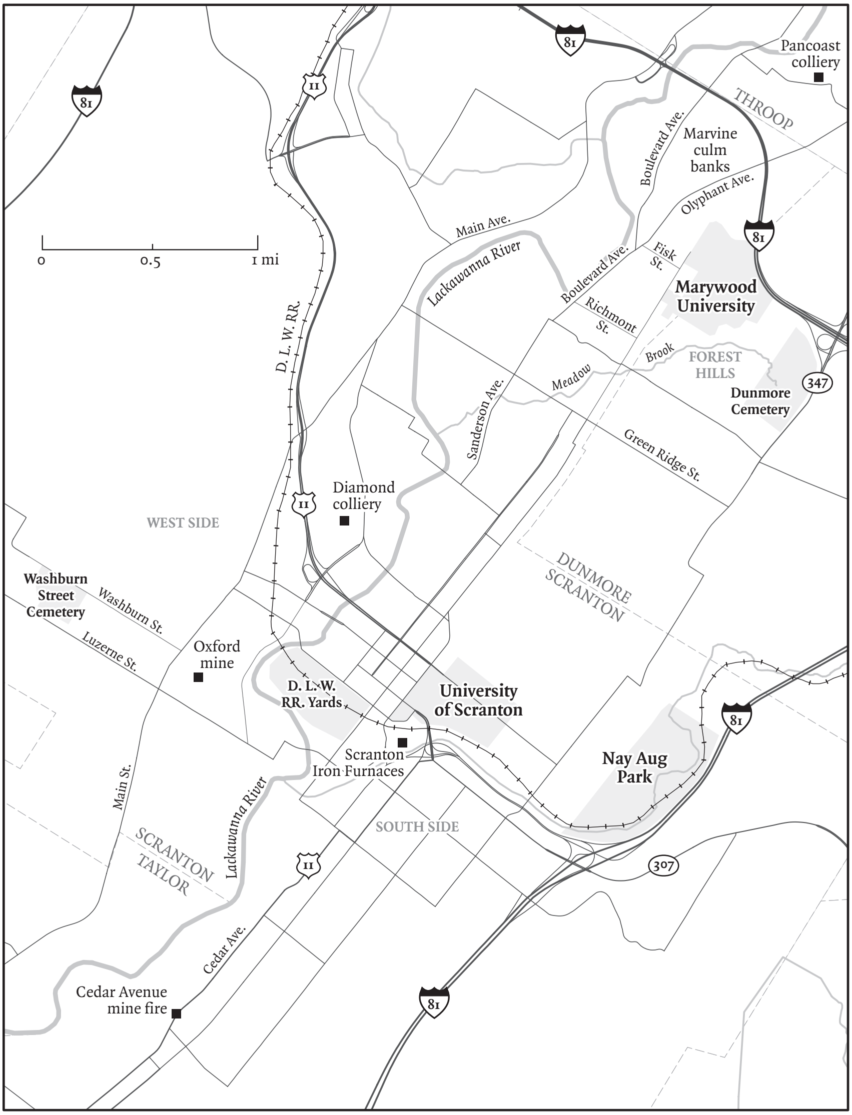
TIMELINE

1866: Scranton incorporated
1869: Avondale disaster
1896: Twin Shaft disaster
1902: Anthracite strike
IHM motherhouse opens
1911: Pancoast disaster
1914–1918: World War I
1915: Marywood College opens
Pennsylvania workers' compensation law
1917: Peak of anthracite coal production
1922: *Pennsylvania Coal Company v. Mahon*
1922–1924: Construction of Liberal Arts Center
1937: Completion of Liberal Arts Center rotunda murals
1937–1945: World War II
1940: Marywood purchases coal pillars
1947: Thirteen acres of Marywood campus flushed
1949: Marywood seal unveiled
1965: Centralia mine fire starts
Cedar Avenue mine fire discovered
1966: Continental mine closes; reopens in 1985 as tourist site
1968: Opening of Learning Resources Center
2015: Marywood centennial
Opening of Learning Commons



Marywood University, with site of Marvine culm banks below, 2008.
Courtesy of Marywood University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Richmont St.
Brook
FOREST HILLS
Meadow
347
Dunmore Cemetery
Sanderson Ave.
Green Ridge St.
Diamond colliery
11
WEST SIDE
DUNMORE SCRANTON
Washburn Street Cemetery
Washburn St.
Luzerne St.
Oxford mine
D. L. W. RR. Yards
University of Scranton
81
Nay Aug Park
Scranton Iron Furnaces
Main St.
SOUTH SIDE
SCRANTON TAYLOR
Lackawanna River
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307
Cedar Ave.
Cedar Avenue mine fire
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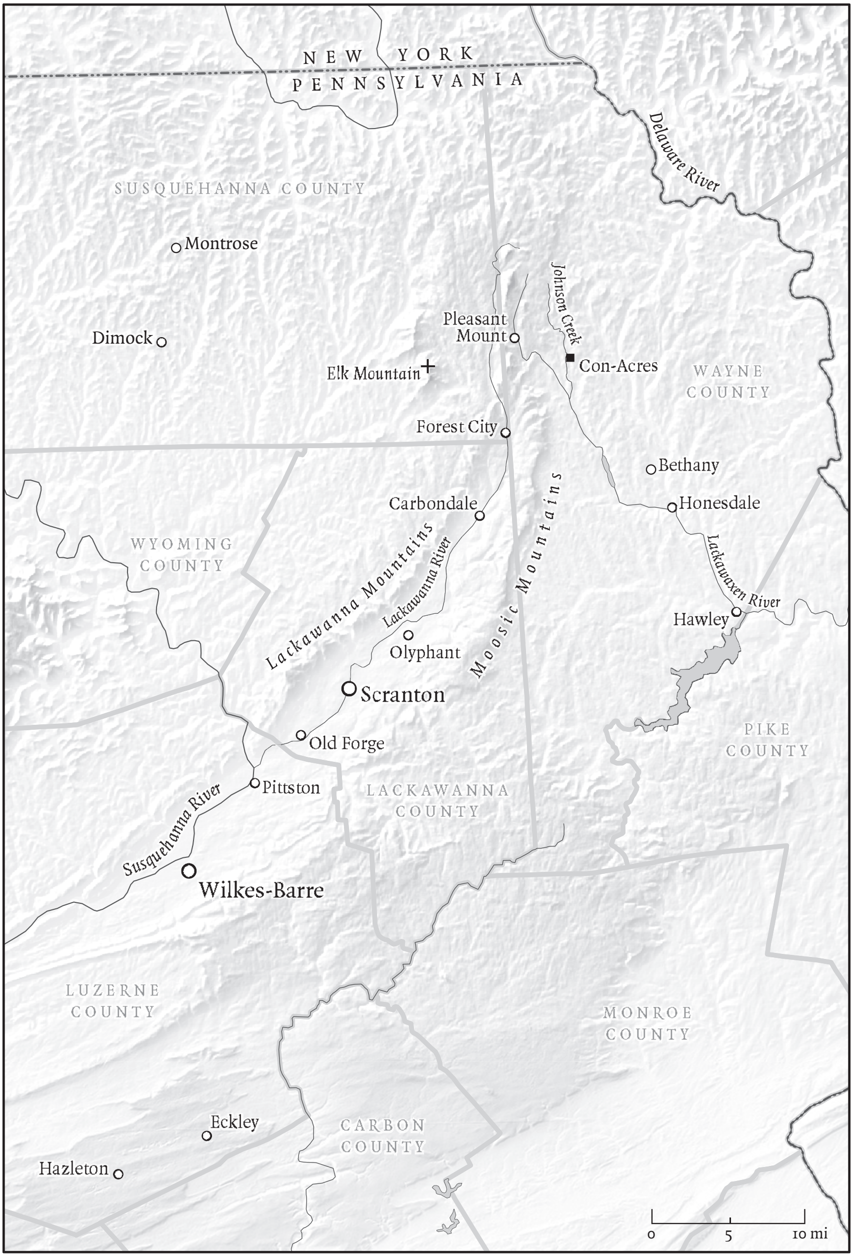
Scranton, Pennsylvania. Erin Greb Cartography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Montrose
Dimock
Johnson Creek
Pleasant Mount
Elk Mountain
Con-Acres
WAYNE COUNTY
Forest City
Bethany
Honesdale
Carbondale
WYOMING COUNTY
Lackawanna Mountains
Lackawanna River
Moosic Mountains
Lackawaxen River
Hawley
Olyphant
Scranton
Old Forge
PIKE COUNTY
Pittston
LACKAWANNA COUNTY
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Northeastern Pennsylvania. Erin Greb Cartography

Undermined in Coal Country

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ONE

Campus as Question

■ ■ ■

Thy fields and groves of green . . .

Marywood alma mater

Marywood University does not exist alone, nor can it understand itself apart from its location in northeastern Pennsylvania, in the Lackawanna Valley, home to Scranton, an unstable place with a long history of environmental catastrophe, a center of the “most densely populated urbanized mining region in the United States.”[1]

Statistics tell two stories about Scranton: one about mining, the other about the aftermath of mining. In 1912, miners took six million tons of coal from beneath the city. Twenty-seven Scranton collieries—more than one per square mile—worked thirty-three mines and employed 14,500.[2] In the period 1872–1915, mining in Scranton disabled more than 1,700 mine workers and killed more than 800.[3]

The aftermath: high poverty, high unemployment, and low income. Making matters worse, Scrantonians today shoulder the highest tax burden in the county, and the city racks up budget deficits every year, which politicians paper over with borrowed money and sales of city assets.[4] Given all this, it’s no surprise that Scranton, the only second-class A city in the state, lags other regions in educational attainment, despite a dozen nearby universities.[5] More than two decades after Pennsylvania declared Scranton financially distressed, the city shows no signs of regaining its fiscal footing.

These facts make living here an unsettling experience, even if, and maybe especially if, you’re a native Scrantonian. The city dweller who hears a small-town, blue-collar narrative about home can hardly bear the financial numbers.[6]

Despite this, most Scrantonians still accept the story of heroism that many tourists bring to town, one that begins and ends with coal: hard work, class struggle, and family survival. This version of history, however, forgets what happened to the earth.

The narrative of extraction recounts removal of parts of this place to feed other places. The story defines loss here as gain there. Although anthracite miners suffered low wages, life-threatening work, and environmental havoc, the United States grew stronger. The tale ended badly, however, because it arced toward exhaustion; the story line offered little room for revision. The anthracite capital of the world is now just another rust-belt town. Faced with this narrative, young people have been fleeing Scranton for decades; the dominant trend today is to learn here and land a job elsewhere.

Focused on the extraction narrative, historians study economic, social, and labor aspects of the coalfields. They often downplay, however, the environmental story, despite the obvious physical damage. The Anthracite Museum remembers industrialization, immigration, and unionization but displays few reminders of the pillaging of the place. Nor do its exhibits note that as extraction industries failed, locals shouldered environmental legacies, questioned jobs-versus-land trade-offs, and demanded reclamation. After the last coal companies stopped deep mining in the 1960s, Scranton was left with a polluted river, stripped land, unstable ground. And little money.

With its extraction narrative worn thin, Scranton now whispers a narrative of subsidence, a story of instability, collapse, and loss. In this subplot, surface appearances suddenly give way to hard realities long in the working. Recalling trauma that some would rather romanticize, the gaps simply get measured, backfilled, and forgotten.

Revealing a buried past, a mine subsidence reminds people that history troubles the present. Even now, decades after major extraction industries left town, Scranton confronts gaps that open every so often. In 2012, the local paper confirmed that a mine cave had damaged a South Scranton street; about four feet wide and six feet deep, the pit represented only one episode in a long history of neighborhood subsidences. To fix the problem, the Department of Environmental Protection hired a “contractor on an emergency basis . . . [to] backfill the hole.” Mine maps, however, revealed a deeper issue: a void within twenty-three feet of the surface.[7] The discovery suggests that city subsidences will not end soon; living with what’s left, working out of a troubled past, will take lifetimes of effort.

Extraction and subsidence tales sometimes get told in the same breath. Vice President Joe Biden often describes Scranton, his “hometown,” with a “rough-and-tumble, folksy, working class vibe."[8] His superficial descriptions nod to anthracite mining as well as to enduring the effects of mining. Although his working-class story celebrates surfaces, his rough-and-tumble tale reveals that neither his story of this place nor the place itself is as stable as it appears.

Celebrating surfaces masks the fact that, for too many, making a living here has become making for war. To fill economic gaps created by financial cave-ins at Thomson Consumer Electronics in 2001, Scranton Lace in 2002, and Cinram in 2012, businesses in the Lackawanna Valley supply the American arsenal. The Scranton Army Ammunition Plant, which opened in 1953 in old locomotive shops, contributes artillery rounds and mortars to "America's permanent war economy."[9] In cash-strapped Simpson, fifteen miles north of the city, Gentex manufactures military helmets. In midvalley, in Eynon, General Dynamics makes parts for the US Army's Abrams battle tank; in nearby Archbald, Lockheed Martin puts together "laser-guided kits" for smart bombs. A few miles away, in Jessup, BAE Systems, which "manufactures combat helmets and body armor," closed in 2015 because of the withdrawal of US combat troops from overseas. South of Scranton, Tobyhanna Army Depot, which makes and repairs electronic military systems, sprawls across 1,300 acres.[10]

Scranton's story is not unique in Pennsylvania. Allentown, Altoona, and Pittsburgh tell versions of the same story, which gets told everywhere, really. This commonness may be why so many people look beyond sites like Scranton, in search of purer places or mythic pasts that make sense of things, places that order a bewildering world.

Living on the coal measures under Scranton is a lesson in learning how to read beyond the surface of the ground I stand on. Working on the coal measures under Marywood, I teach people to read beyond the surface of fiction, poetry, and drama. On unstable ground, and working with words, which are inherently unstable, I know I can offer only unstable answers to students' many questions.

■ ■ ■

From my office windows in the Liberal Arts Center, I look out on Memorial Garden, a commemoration of the 1902 motherhouse, where Marywood got its start. I can see the Learning Commons behind a screen of trees, long stretches of lawn, and, in the distance, the Lackawanna Mountains, which form the western horizon. With the pastoral feel of a postcard college, the campus offers the fantasy of an unchanging landscape where serious thought happens in sacred groves, where romances unfold under towering oaks, and where dogwoods bloom all spring and summer. Even neighborhood streets—Green Ridge, Grandview, Richmont, Woodlawn, Fairfield—invoke a time prior to the Pennsylvania Coal Company.

Not satisfied with this spectacular view, one day I wandered out onto the roof of the Liberal Arts Center. From there, I saw a wider perspective: before me lay Scranton and much of central Lackawanna Valley, from Dickson City to Taylor, bound by long arcs of mountains that disappeared southward. To discover even greater vistas, I mounted a ladder bolted to the brick wall of the rotunda. Now I could see farther south and north—more streets, larger stands of trees, more distant hills—a quiet, unchanging prospect.

In the rotunda wall stood a door, so I tried it. Inside, a grid of steel beams arched before me; I could make out beneath them the back side of the *Mural of Faith, Hope, and Charity*. Dimly lit and paper thin, the scrim had a surreal glow, its figures mirror traces of what I usually saw looking up from below. When I leaned in to get a better look, I almost fell through the picture, out of its sky. Having seen enough, I wound my way back to the English Department.

In 1924, when the Liberal Arts Center first opened, I could have studied from atop the rotunda just about every coal breaker in the valley, including the Pancoast and Marvine breakers, two blackened buildings rising perpendicular to the valley floor, their hard edges unlike the curves of the rotunda dome. In 1924, I would have heard the rumble of coal cars and the shriek of train whistles, and I would have known the rotten-egg stink of mine fires, which would have mingled with factory smoke billowing across the city. By 1949, however, coal companies had closed most collieries, scrappers had dismantled most breakers, and railroads had all but stopped running; with these disappearances went the smoke and the shrieks and many of the people.

A regional Catholic comprehensive university, Marywood trains workers, educates citizens, and helps human beings. Running the risk of being all things to all people, the university offers programs in a slew of fields, everything from architecture to art therapy, nursing to nutrition, teaching to theater. As a medium-size institution with a strong liberal arts core, the school occupies an uneasy place in higher education; neither a large research university nor a small liberal arts college, it has attributes of both. Beyond these surface separations, however, Marywood shares an essential characteristic with all universities: wrestling with abstract ideas, this place is at once apart from and a part of the community that surrounds it.

A native of the region and a Scranton resident, I work in a small English department. Six of us offer a variety of courses for our forty majors, and we teach three courses that are required of all undergraduates. A generalist, I teach world and American literature, so I need to know something about many things. Alongside teaching, I advise students, serve on committees, and write about the stories I read. A reader solely dependent on these measures, I find myself in a frame of reference that is as much up and down as it is across. To keep my place, I think carefully about the deep structures of what I read and where I live, which is another way of saying that my reading of the world has been shaped by my reading of literature: it's all about text, context, and subtext.

I help people to become better readers and writers. Interdependent, reading and writing are ways of thinking about the world. They help us to perceive and express our responses to what happens to us, and they can help us to hope and dream, to right wrongs, and to connect with others. Reading good writing is not just a classroom exercise; to read a poem or a story is to use mind, body, and spirit. Literature gives back to us our lived experience, I tell students, and offers a space in which to think about ourselves. In seeing our lives anew, we can, maybe, readjust our perspectives and priorities in ways that can renew our attention to each other and to what lies beyond us. In a world of mutually assured destruction, global climate change, and wars on end, we need this more than ever. If we don't read, if we don't write, we're dead.

In my work as an English teacher, I often think about how literature represents place, so I sometimes wonder, what does this school, Marywood, mean? What do its grounds express? Why spend tuition money planting flowers and building a community garden? Why maintain an arboretum, a kind of museum of trees? Why accept state reclamation of forty acres of mine-scarred land and then hire an artist to redesign it? Why start a green architecture program? Why pump mine water to heat and cool buildings? How does the place create an environment for learning? And what role does literature play in all of this?

Connections among literature, person, and place run deep. In his essay "A Literature of Place," Barry Lopez asserts that three "qualities" serve as a "fundamental human defense against loneliness": (1) "paying intimate attention" to a place, (2) creating "a *storied* relationship to a place," and (3) "living in some sort of ethical unity with a place." In enacting these, he concludes, one is not "forgotten, cut off, abandoned." Literature connects us to one another because shaping our individual lives demands that we think carefully about who we are and how we relate to the people and world around us. To think carefully demands that we pay attention to details; in literature details cohere to represent patterns in others' lived and imagined experiences. In absorbing these patterns, we can measure our own. If we can't think carefully about who we are, we'll do serious damage to others and the world.

My life in Scranton plays out across the experiences of the dead. Although most of the people who shaped the city never made it into standard histories, they continue to revise the history I discover. I find their lives in fragments, scattered among letters and ledgers, institutional archives, and church histories. These unstable, failing, and often illegible papers have something to say, however partial, and, in one way or another, each writer pushes me to think of home as ever more involved, and its past as ever more alive, despite how little I've learned. Accounts of the past are incomplete: people forget, misremember, and, in the archives, manuscripts shed pieces, handwriting dims, lives and times get mislaid. The pieces that remain point to people searching for answers they never found, but, when all is said and done, what life doesn't tell much the same story?

Absent from standard histories, miner George Bowen wrote poems in chalk on the roof of his workplace, the Storrs mine.[11] Published in 1901, his first volume, *The Legend of the Mines*, appeared on the heels of the 1900 strike, the first successful United Mine Workers general strike in the anthracite fields. An October agreement sent miners back underground with a 10 percent wage increase but with no collective bargaining rights.[12] Having reflected on the walkout as it happened, the self-taught poet included strike poems in *Legend* at the "request of many miners . . . to illustrate a condition more than to expound the ethics of true Poetry."[13] The poems pit poor strikers against wealthy owners, perhaps unsurprisingly, but they also portray the poet's own struggle for recognition. In chalking the gap between surface and subsurface, Bowen marks a tension between the strikers' visibility and anonymity.

In "Jim, Our Neighbor, 'S Shouting, Mary," Bowen repeats at outset and end a stanza describing striker Jim's public joy at the union victory, which will place him back at work, out of sight. The heart of the poem, however, remembers the "twenty years and more" of misery the speaker and his family privately endured while caught in the "tyrant's chains": an empty cupboard, accumulating debt, and two dead children, their "graves unmarked," the miner's greatest grievance (25, 26, 70). Justifying to his wife his participation in the strike, the speaker, who has worked "within the mines obscure" to "make [their] cottage bright" and who has seen "its brightness dimmed away," claims that he "would rather die, Mary, / Here, starving at your feet, / Than to be called a 'scab,' Mary, / Out on the open street" (42, 60, 64, 85–88). That he would die "here," presumably inside the cottage, stands as counterpoint to his inability to "mark / The spot where lies his dead" children, an inability symbolic of the strikers' partial victory when they return underground without gaining union recognition (79–80).

The speaker in “The Miners Have Agreed, Mary!” celebrates the 10 percent raise and what it can buy: “coal and rent; / A suit for our oldest boy, Mary! / And for yourself a gown,” which he anticipates her wearing “in town” (4–6, 8). A gravestone to mark the children goes unmentioned, but the speaker looks ahead to his own death, taking “sweet solace” that he “struck for [his] children’s children,” who will not bear, as he does, the “imprint of the tyrant,” which is “branded on [his] brow” (65, 67, 69, 70). His final comfort is to be marked no more: the tyrant “cannot brand us now” (72).

Bowen is not a great poet as poetry is usually measured, and, in his preface to *Legend*, he says as much, admitting that he has compiled a “volume of imperfections, crude in construction, weak in expression, and tuneless in numbers” (4). But his act of creation is a hope for recognition, something we all seek. Here is a miner from childhood working in a dangerous occupation in its most dangerous era who expresses what people search for in literature: “While delving daily in the gloom and the shadows, my mind hungered for the beautiful, fluttered among the stars, and longed for something unknowable” (4). John Keats wrote on water, Bowen chalked on coal, but both sought something more: transcendence, truth, insight. In 1926, miner’s asthma—black lung—forced Bowen into retirement; three years later, he died, at fifty-eight.[14]

■ ■ ■

What is place?

George Bowen used the word “place” to name where he worked, at the face. For many who write about it, place is space made meaningful. It possesses a comforting solidity. Some even claim that a sense of place defines American identity. Others assert that the concept grounds any discussion of history and literature, our storehouses of “environmental memory.” For most, though, place is home.[15]

“Bioregion” means “life place.” Valuing the local, bioregionalists attend closely to the flora and fauna of a region, learn its natural and cultural history, and study its social and economic problems. Actively living rather than passively being in a place, bioregionalists, who are often nonnatives, immerse themselves in a locality and repair the human-made damage that they discover there.[16] If enough people do the same, they argue, humans will tread more lightly on the planet. Prominent bioregionalists include Wes Jackson, who promotes place-centeredness in reinhabiting Salina, Kansas, and Wendell Berry, who, after a stint as an academic in New York, returned in 1962 to his native Kentucky, where he tends to a small farm and writes about the importance of place.

Not everyone, however, believes that bioregionalism is the best approach to thinking about place. In addition to an antiurban bias, critics claim, the bioregional focus on the local can lead to nationalism and class- and race-based exclusion. Others point out that a local sense of place cannot cope with worldwide environmental issues, particularly climate change. To solve such problems, they assert, people must develop a sense of place *and* a sense of planet, an eco-cosmopolitan way of seeing. This approach does not dismiss the local outright; instead, it leads one to discover wider and deeper connections among places.[17]

Caught up in tensions between local and global, as we all surely are, we have a responsibility to thread together in our conversations people and lands—we must place what we say in contexts near and far—if we hope to act as citizens of the world and to escape the traps of ethnic hatred, racism, and environmental mayhem. Assuming that place-centeredness solves all problems may be a fiction, but so is the idea that we can right our most pressing problems with our eyes fixed firmly on the globe. We need to set our sights on both.

Place may be local, place may be global, but taking its measure anywhere is tough. Australian Aborigines and natives of the Arctic North have an acute awareness of the regions they inhabit, despite their nomadism.[18] Agreeing on the physical limits of place has always been difficult, of course: a place can be a backyard, a back forty, or the back of the moon.[19] Making matters more complex, environmental damage unfolds not only in place but also across time. Most people tend, however, to see place as horizontal, to the exclusion of the vertical. Too often, they look out and about, even up, but hardly ever down, deep down, where all is dark.

Place possesses not only extension but also depth, in time as well as in space. Adding depth to definitions of place—interrelating seen and unseen, present and past—opens new ways of knowing working landscapes.[20] Scranton has a history of mine subsidence and mine fires that reveals it to be a scene of displacement—of ground, people, and industries. To know Scranton is to know a working landscape that struggles to account for the role of time in place. Although the city is a different place now, what it was remains scattered within it: in backfilled coal seams and barren banks of culm, or coal waste. Living in Scranton, a city that stands on human-made voids, I understand, above all, that "place *is* question."[21] To read Scranton is to write a narrative of subsidence.

The greater Scranton bioregion has long been pockmarked with dead zones, scores of acres of mined land, the region's *memento mori*. Within some of these dead zones, however, clinging to culm banks, stand birch and cherry trees, green with hope, living metaphors of reinhabitation. Although many culm banks appear indistinguishable from the hills people found here, their trees have no firm footing; often they haven't the reach, the root system, or the protection of companions to help them to reach full height. They keep uncertain holds on fake hills that are otherwise as clean as skulls. If trees atop culm can be read as a metaphor for what may happen to the earth, they offer a double meaning: life will win out, despite human carelessness, even though our thoughtlessness will undo us and diminish the rest.

If people are serious about reimagining this place, its inhabitants—including me—need to know how the place came to be as it is now. This effort requires remembering the work that has been done and not done, and includes the thinking that has gone on and not gone on and the assumptions behind both thinking and doing.

Thinking about what I do is a lesson in paying attention; people who profit from plundering the world would rather I not learn, or teach, this lesson. Scarred land, like all collateral damage, is best forgotten, they say—keep an eye on the big picture. Teaching me how to pay close attention, literature and history intersect in their emphasis on telling complex stories about human motivation, human connection, and the human condition. They ask questions about good and evil and right and wrong. Addressing these questions to powerful interests is important right now, perhaps especially in a place threatened by yet another extraction industry.

■ ■ ■

I used to think about place as surface, to see it only horizontally. But when I learned that seventeen coal veins underlay Scranton, I realized that place has depth—an awareness that has changed how I see where I am.[22] At the same time, I discovered that no matter how carefully a miner maintained his surface life—his home—his work underground undermined all his efforts. Planting a garden, cutting the grass, or fixing a sidewalk couldn't stop rust from polluting streams, soot from fouling lungs, or subsidence from sinking schools. I then knew Marywood as an unstable place caught up in an extraction narrative that stretched beyond campus.

Coal mining shaped, in part, the kind of education that Marywood offered. Sisters, Servants of the Immaculate Heart of Mary (IHM) settled in Scranton to educate the immigrant poor who had come to the city in hopes of landing mining jobs. Teacher education has been an institutional pillar since Marywood's founding. Because mining remade so many women and children into widows and orphans, the school early on established programs in home economics that included nutrition studies. In the 1940s, the college offered courses in local immigrant languages: Lithuanian, Polish, and Slovak.[23]

An undermined Catholic university that overlooks a distressed city, Marywood is acutely aware of its unstable place. On a practical level, its hollowed subsurface endangers building foundations; an uncertain foundation, after all, makes it tricky to transmit the institution's bedrock beliefs. On a more abstract level, however, the university finds itself in an unstable theoretical position. At the same time that it upholds church principles, the school dedicates itself to offering students multiple and sometimes conflicting perspectives on many ideas. Doubt about one idea, the existence of God, is the ultimate gap in instruction, a gap that gets filled with faith, often, but, as at many faith-based universities, this surface stability sometimes stifles discussion of issues such as, for example, abortion.

The figurative equivalent of mine subsidence, a break in Marywood's public narrative reveals unresolved tensions within the institution that can create instructional spaces, or "teachable moments." In 2008 a Marywood history professor, an IHM sister, found herself at odds with the local bishop over how church teachings should guide Catholics in voting for presidential candidates. Should voters focus solely on the issue of abortion—as the bishop believed—or should they also weigh other life issues, such as racism? At a public forum about the election, the sister supported her position by citing an official statement of the US Conference of Catholic Bishops (USCCB); in response, the bishop stated that "No U.S.C.C.B. document is relevant in this diocese . . . The U.S.C.C.B. does not speak for me." Although the university offered no official reaction to the standoff, Marywood instructors used the controversy to open conversations about questions of conscience.[24]

Questions of conscience now need to be asked about campus lands, not just here but everywhere. Although many environmental writers earn a living at universities, few see their place of study as a place to study. Even those who do fieldwork tend to explore distant environments rather than their own college grounds. When they do write about their workplace, too often they understand it as self-contained, divorced from its relationship with the surrounding region and beyond. Since extraction industries have free rein to operate on lands of public institutions, this way of thinking is potentially dangerous.[25]

At Pennsylvania colleges, the narrative of extraction has become law. In 2012, the state green-lighted private, multinational corporations to siphon natural gas from under its fourteen universities. An effort to reduce tuition, the Indigenous Resources Development Act invited companies to engage in “fracking, oil drilling, and coal mining on campus,” in effect zoning colleges as industrial sites. Ohio, Texas, and West Virginia have okayed similar arrangements, as has Tennessee, which allowed the University of Tennessee in 2013 to permit fracking in the Cumberland Forest. Pennsylvania college students may soon see how drilling mishaps foul air, pollute water, and explode pumping stations, events that have happened across the state. If nothing else, natural gas drilling demands that more people examine the relationship between the environment and the university—a relationship that stands at the intersection of the local and global.[26]

As the narrative of extraction takes hold on Pennsylvania campuses, the narrative of subsidence tells the story of the liberal arts across higher education. Colleges are defunding departments, eliminating programs, and cutting faculty positions. In 2010, the University of Albany suspended programs in “French, Italian, Russian and the classics.” In 2011, the Penn State English Department cut its course offerings and eliminated fellowships in its MFA program. Between 2009 and 2014, Louisiana State University cut fourteen foreign language instructors, in a period when the state reduced higher education funding per student by 43 percent. In 2012, Emory University downsized its Institute of Liberal Arts and suspended its graduate programs in economics and Spanish. When the University of Southern Maine fired faculty members in 2014, most of those let go were liberal arts professors in “arts, economics, English, philosophy, sociology, theater, music, public policy, and honors programs.”[27]

Almost daily, the national media announces the impending death of liberal arts education. The Associated Press reported in 2012 that “today’s increasingly career-focused students mostly aren’t buying the idea that a liberal arts education is good value.” As a result, liberal arts colleges are disappearing as institutions devoted to the liberal arts. Since 1990, the number of liberal arts institutions has declined from 212 to 130. The head of a group of 27 public liberal arts colleges defines a liberal arts education as less about content—particular disciplines—and more about teaching style: “It’s about small classes, access to faculty, the old tutorial model of being connected with somebody who’s not interested only in their disciplinary area but culture broadly defined.” In a sign of the times, in 2012 presidents of liberal arts colleges gathered at Lafayette College to explore ways to attract more students to their schools.[28]

In state capitals, meanwhile, governors demand that public colleges only train workers rather than also educate citizens. In 2011, for example, the governor of Florida "questioned whether it was in the state's best interest to graduate students with degrees in anthropology . . . 'we don't need them here,' " he noted. In 2012, a Florida task force recommended "charging students who major in humanities disciplines more to discourage them from entering those fields." To align their states' higher education systems with the needs of the job market, governors in Texas, Florida, and Wisconsin proposed measures in 2012 to create four-year degrees that cost $10,000 and to fund departments that graduated students in majors that are more likely to land them jobs. In 2013, the governor of North Carolina proposed measures to fund state higher education based on the job market, telling citizens interested in, for example, gender studies to "go to a private school"; he would also not subsidize PhD programs in philosophy.[29]

Anxiety in Pennsylvania over high tuition, high unemployment, and high student indebtedness may be why two statehouse Republicans introduced in 2012 a bill to offer grants to "responsible students" at state universities who intend to "pursue a course of study and select an academic major that is likely to lead to gainful employment opportunities." A Job-Ready Major Evaluation Advisory Committee would choose the majors that meet its definition of job ready; the committee would be composed of representatives of agriculture, business, and manufacturing; a statewide union; a government watchdog group focused on fiscal responsibility; and the secretaries of labor and industry and community and economic development.[30] Apparently, no one from the state system of higher education, neither from the faculty nor from the administration, would be invited to help.

Had the measure become law, Pennsylvania would have supported the "responsible student" by distributing money to individual state universities that would then "apply the total amount of the payment to the academic department in which the student has declared a major."[31] This would have privileged "job-ready" departments to the detriment of departments whose programs are not as in demand but may support the mission of the school, which at a state institution should be educating students for the work world *and* for life, including life as responsible citizens. Tilting funding to "job-ready" departments would have especially hurt humanities programs, which would have been unlikely to get the nod from a Job-Ready Major Evaluation Advisory Committee. Philosopher, historian, and poet tend not to appear in help wanted ads. In effect, the proposal would have made job training the only mission of Pennsylvania state colleges and universities.

Similar reactions to the same economic anxieties have surfaced at Marywood. At a 2012 forum focused on the educational needs of the current generation of students, a member of the physician's assistant program (home of a job-ready major, no doubt) lamented that students often don't select majors that lead to good jobs. Her examples: English and women's studies. English majors do land jobs, an English professor pointed out, and women's studies majors learn about the systemic reasons why women are shut out of some workplaces. After admitting that she didn't know much about the employment successes of English or women's studies majors, the PA person simply offered another example: her daughter had majored in theater, of all things, and now supported herself as a waitress.

Moreover, the humanities deal in uncertainties, contingencies, and possibilities. Reading literature means tuning into ambiguity, irony, and metaphor, which are inherently unstable aspects of representation and interpretation; as soon as someone starts explaining a text, someone else points to that reading's shaky ground. Teaching people to live with uncertainties, the ultimate human condition, literature unsettles the mind and the imagination and shows people that they cannot simply absorb on faith what they read, hear, and see.

If the arts and humanities don't matter, as so many seem to claim, why do major corporations sometimes react so fearfully to them? Is it because the humanities encourage people to question the way things are? The coal industry, although not much into ambiguity, pays attention to the visual arts. In 2012, "University of Wyoming officials sped up the removal of a controversial anti-coal sculpture" a year before its scheduled dismantlement. The sculpture "seemed to forge a link between coal and environmental destruction and seemed like a visual rebuke to the coal industry." The president of the Wyoming Mining Association called the sculpture a "stab in the back." An executive of Peabody Coal claimed that the temporary sculpture "threatened its willingness to donate $2 million" to the university.[32] Signs and symbols matter.

■ ■ ■

When the Marywood president officially addresses students, staff, and faculty, she stands behind the university seal. Few pay much attention to it, but the seal plays a prominent role in university gatherings; a kind of shield, it leads the procession at graduation and stands beside the podium at convocations. At every general faculty meeting, it hangs up front, affixed to the lectern; people encounter it almost everywhere on campus: in university letterheads, on building signs, and in alumni publications. More than a metaphor for authority, the seal announces the institution's name, spells out its identity, and offers its definition of education.[33]

Created in 1949, the symbol displays a series of long-felt institutional tensions related to Marywood's unique relationships to its local environments, both natural and human made: a black diamond touches a golden Immaculate Heart of Mary that arises from a forest-green background. On the line that separates green and gold stand fleurs-de-lis; buried below rests the black diamond, which nods to the "city of Scranton . . . the heart of the once-thriving anthracite coal district."[34] In dividing a green earth from subsurface coal, the seal echoes geological drawings of local coal measures.

The forest green, the golden fleurs-de-lis—which represent the Virgin Mary—and the golden Immaculate Heart spell "Marywood" iconically. Atop the shield within the seal, these elements defend the university's guiding principles: holiness, knowledge, health (spirit, mind, body), written in green, a color that alludes to nature and to the once-dominant ethnicity of the local congregation: Irish. The outer gold, black, and green rings reinforce the seal's connections among spirit, culture, and nature.

To know these connections, the seal asserts, one must study the text at the diamond's heart: the open book of learning, on which is inscribed the first and last letters of the Greek alphabet, alpha and omega, allusions to the book of Revelation (Apocalypse). Literally and figuratively, the seal buries the book of learning within the book of nature, suggesting that the book must be read against its local context, the region that produced the prosperity—the gold—that surrounds the diamond. Nodding at the centrality of the book to the institution's mission, which is founded on Catholic social teachings rooted in the Bible, the seal represents a university that stands at the uneasy intersection of person, place, and planet. If nothing else, the seal teaches the reader about learning in a working land.

TWO

Wood

▪ ▪ ▪

> There's no distinction between the tree and its history.
>
> Wendell Berry, *It All Turns on Affection*

Chipping at the face required a lot of lumber. Anthracite miners brought wooden ties below to anchor rails, planks to fashion flumes, and boards to build chutes. Coal cars, breakers, and outbuildings: most were wooden. In 1925, the Anthracite Region consumed annually about half a billion board feet, which worked out to a little more than seven feet per short ton of coal. By contrast, bituminous operators ate up only four. Oak and pine made up much of this lumber. And much of it required constant replacement: mine props, for example, had to be changed every one to three years. Miners called this labor dead work.[1]

To shore up underground chambers, workers typically fitted two legs to a notched crossbar, wedged the legs to floor and roof, and topped a series of these with planks and small poles. Miners preferred props cut from oak, maple, and hemlock; they rejected beech, common locally, as too quiet. Even during times of tight supply, they would usually refuse not only beech but also "aspen, pin cherry, basswood, and white pine." Wood of "high compression strength," timbers had to "give way gradually" to warn workers of an impending collapse. Although props couldn't bear the weight of the world, their cracking sounds did signal that the world nearby was about to come apart.[2]

Demand for timber made the Lackawanna Valley a graveyard of trees. Untold acres of woodland, not only in the valley but also all across northeastern Pennsylvania, disappeared underground. Patches of pine, stretches of oak, stands of hemlock: gone. By 1881, hemlock, once thought "inexhaustible" in eastern

Pennsylvania, had been devastated by tanneries and collieries. With the collapse of the tanning industry and despite bringing high prices in New York and Philadelphia, much remaining hemlock went below as planks and props, the demand increasing as tunneling spread ever further, ever deeper.[3]

With coal mining expanding and local lumber supplies dwindling, timber dealers scrambled in the 1870s and 1880s to north-central Pennsylvania. In 1887, Lackawanna Lumber Company, of Scranton, built a sawmill in Mina, just west of Coudersport, Potter County. To transform forty thousand acres of remote hemlock and hardwoods into boards and props, the company opened two more mills in 1893, both at Cross Fork, also in Potter County. Twice burned and rebuilt, the Cross Fork mills chewed up in fifteen years the "original tract plus several thousand more acres." At nearby Austin and Galeton, a competitor's sawmills filled orders for the Delaware, Lackawanna, and Western Railroad, owner of several Scranton area collieries. By 1898, most timber used in anthracite mines originated in central Pennsylvania, 50 and sometimes more than 150 miles from Scranton. After reliable timber sources disappeared in north-central Pennsylvania, loggers foraged elsewhere. When Lackawanna Lumber closed its Cross Fork mills in 1908, the company left the state and went south.[4]

Keeping a close eye on the timber industry, coal operators shuddered as lumber costs climbed steadily in the early twentieth century. In 1905, round timber fetched, on average, seven cents per cubic foot. By 1921, lumbermen pocketed twenty-two cents on every ton of anthracite. The next year, 1922, they took twenty-five cents. More price hikes loomed: the Forest Service warned that remaining timber was not only more costly but also of "inferior quality," creating a "serious problem" for mine owners. Adding to company worries, dealers cautioned that supplies from the South would soon dwindle.[5]

Desperate to cut costs, coal operators turned tree planters. In 1911, the Delaware, Lackawanna, and Western Railroad incorporated the Moore Timber Company to operate a yellow pine plantation in Florida, a venture that lasted only eight years. The Delaware and Hudson Company planted tree farms in Bluff Point and Wolf Pond, New York; the former grew red pine, the latter Scotch pine. In 1913, D&H hired a full-time forester to create a forest management program. The next year, the company sent a crew just north of Forest City to plant 250,000 red oaks east of the Lackawanna River. After setting out an extra 30,000, the men moved on to Quebec to plant 600,000 more; the company planned to return to Forest City in 1915 to set out an even "larger lot" of trees. In 1921, D&H prepared to spread 1 million seedlings across a hundred thousand acres of mostly wasteland.[6]

In 1920, relief arrived: the full opening of the Panama Canal made West Coast timber more available. Anthracite operators snapped up “shipments of Douglas fir timbers from Oregon, several boat loads of anthracite mine props . . . [that were] in competition with rough piling from the Carolinas.”[7] Northwest lumbermen marketed timber in eastern Pennsylvania because they knew that the state’s supply of “fit props” had been all but erased. In 1922, Pacific Coast companies also found in the Anthracite Region a “particularly promising market” because it used so much wood in so small a spot; the area absorbed “approximately 62,000,000 cubic feet of lumber annually in mining operations alone.” Although it made up only about “fifteen per cent of the total coal production of the nation,” anthracite used “at least 30 per cent of the timber consumed in coal mining.”[8] And this happened within fewer than five hundred square miles.

But Panama Canal traffic not only hauled timber that propped up coal mines, it also carried a killer of anthracite production: oil. After the first tanker crossed the canal in 1922, it didn’t take long for coal’s market share to collapse. Whereas in 1909 bituminous and anthracite provided 92 percent of US energy needs, by 1955 they had fallen below 29 percent. And little of this was anthracite.[9]

■ ■ ■

For a long time, I thought that the farm anchored the family tree. History tells a different story. In the early twentieth century, most of our family went west, to Oregon, something that I knew but had never registered as important. The story I heard as a child was that the Conlogue brothers who settled near Coos Bay fell into the lumber business and fathered only daughters, which meant that the West Coast branch lost the name. I recently found that the migration of these men—for so long only rumors to me—matched the movement of deforestation from Pennsylvania to the Northwest. I am an inheritor of clear-cutting, a still common practice in Oregon.

Like many late nineteenth-century Pennsylvania families, the Conlogues were loggers and farmers. My great-grandfather Peter Conlogue, an immigrant Irishman, worked in the lumber business in Warren County in the aftermath of the oil boom there. After returning east to farm in Wayne County, he cut props for coal mines in Forest City. His brother John, meanwhile, farmed in Potter County, according to the 1900 census; the 1910 tally found him in Coudersport, working as a teamster in the lumber industry, a job he held in 1920 in Portland, Oregon.[10] Between 1898 and 1910, three of Peter’s five sons—Henry, John, and William—left Pennsylvania and settled in Coos County, Oregon, where they built a large logging camp on the Coquille River, south of Coos Bay, north of Bandon.

The brothers clear-cut land. I'm looking at photo postcards, dated April and June 1910, stamped Marshfield, Oregon. In one, "Little Dan," a cousin perhaps, poses with another logger aboard a Shay locomotive. Details matter: slim trees, tangles of brush, and stove wood stacked on the engine, which drives an empty railcar. In the other, two men, surrounded by brush, relax beside double donkeys, stationary steam engines that powered cables to drag logs to yarding sites where they were loaded for delivery to a Bandon mill.[11]

Lumbering was dangerous: limbs fell, cables snapped, logs rolled. In 1910, after absorbing an operation on the north fork of the Coquille, about ten miles from Bandon, the Conlogue brothers ran two logging camps. Faster work, higher anxiety, or just plain accident at this second site in 1911 killed Henry, who was loading logs onto a railcar when the pile shifted, tumbling timbers against his chest. Three days later, as bells tolled at Marshfield Catholic Church, friends and family from Potter and Wayne Counties accompanied his body to the Odd Fellows cemetery.[12] His widow, Jennie, cared for two small children, Mona and Marie.

Life in lumber camps was not easy. In 1913, the International Workers of the World (IWW) forced the Conlogues to suspend operations. If the Conlogue camps were typical, loggers lived in "unlighted and unventilated" shacks, wooden bunks were lousy, and high humidity kept work clothes wet. An IWW "stronghold," one Conlogue camp must have been especially bad. On May 13, poor conditions, long hours, and low pay led all 125 loggers to walk off the job. Although Wobblies could not close other Coos County camps, the strike did succeed in improving camp life: loggers soon slept on clean sheets in warm and lice-free bunkhouses, and injured workers received better care.[13]

World War I brought other changes. In 1916, the US high command feared that further IWW strikes would hurt the Allied effort. Widespread protests against poor camp conditions culminated in November when "special deputies" killed thirty-one Wobblies in Everett, Washington. Anticipating more trouble, Black Jack Pershing sent a retired army captain on a secret mission to the Northwest to keep an eye on things. With the situation deteriorating, the military decided in October 1917 to intervene; the War Department put the captain back in the army and gave him command of all spruce production, the first time that the army took direct control of a civilian industry.[14]

Prior to World War I, the Conlogue brothers, like other loggers, cut spruce trees mainly as a "by-product" of clear-cutting Douglas fir and cedar. During the war, however, loggers couldn't get enough spruce: the military needed it for airplanes. Lightweight, resilient, and resistant to splintering, by 1916 Northwest spruce had become the Allies' "primary supplier of aircraft-quality wood." Caught up in the war effort, in March 1918 the Conlogue camp housed thirty soldiers who helped civilian loggers to cut trees. By July, spruce accounted for about 90 percent of camp output. Although the Spruce Production Division put thirty thousand men to work, its efforts did not yield a "single piece of wood that found its way aloft during the war." It did, however, break IWW strikes.[15]

In September 1918, the Spruce Production Division extended a railroad into a tract of spruce between Beaver Hill and the Coquille River, near the Conlogue camp.[16] The army's plan for the line never fully materialized, however, because on the day after the armistice the Spruce Production Division stopped logging. Nevertheless, the railroad did help the Conlogues; after the war, they used it to haul logs to the Coquille. To fuel the locomotive—and to fire cookhouses and to heat bunkhouses—the Conlogues worked the nearby Klondike coal mine.[17] In Pennsylvania, the family logged props to support mining; in Oregon they mined coal to support logging.

The Conlogues probably never gave a second thought to clear-cutting Coos County. Like their neighbors, and despite the decimated woods they had known in Pennsylvania, they likely assumed that "timber exhaustion was a phenomenon that happened elsewhere, not in the lush forests of the Pacific slope." They may also have believed the story that the "timber resources in southwestern Oregon . . . made Coos Bay 'AN EMPIRE ITSELF'; its forests were perpetual and would never be 'denuded.' "[18]

Stories like these matter. One reason that people can or cannot imagine the damage that we do is the stories that we tell. Stories create mythologies that frame how we see the world. Some mythologies we inherit, some we hear, and others we create. For example, my name linked me, I once thought, to writing and literature; Conlogue meant "with discourses." But after thinking about its links to logging, the name might have more to do with felling trees. Overlaid, my imagined meanings suggest not only a tie between writing and the natural world but also the way they express each other.

■ ■ ■

Trees are more than props. Inviolable, they stand by us, and beyond us.

It's tough for me to read long-told tales and see trees as only so much timber. In the world's oldest epic, the Mesopotamian *Gilgamesh*, the eponymous hero cuts cedars in the sacred forest of the monster Humbaba.[19] After tearing down his trees, Gilgamesh and his sidekick Enkidu then kill Humbaba, despite the monster's pleas for mercy (42, 44). For these acts, the gods decree that Enkidu must die (53). Mourning his friend and fearing his own mortality, Gilgamesh seeks eternal life beyond the "waters of death" (79), only to learn from Utanapishtim, the "distant one," that "cruel death cuts off mankind" (81, 82). As if to underscore its theme of impermanence, the epic survives in fragments of the original clay tablets; now broken, large parts of the poem are lost, leaving large gaps in translations (xiii, xv).

In Greek mythology, gods make people into trees. When Apollo pursues Daphne, a huntress, the chase ends when Zeus changes her into a laurel tree. When Baucis and Philemon welcome into their home the disguised Zeus and Hermes, whom others had turned away, the gods reward their hospitality by transforming the old couple into trees, oak and linden.[20]

Trees play central roles in biblical loss and renewal. In Genesis, the Fall begins in the shadow of the trees of life and knowledge, which must have cross-pollinated to bear fruit: to eat from one is to eat of the other. In Revelation, Christ undoes the Garden decree, offering humanity the right to taste the tree of life (2:7). At the crux of the New Testament, Christ hangs from a tree, the Cross, a sign of faith in resurrection.[21]

In Norse mythology, Yggdrasil holds aloft nine worlds and binds together heaven, earth, and hell.[22] From under its roots rises the "spring of Mimir, in which is hidden wisdom and understanding" (43). As maidens Past, Present, and Future water the ash (44, 45), the world tree "endures more pain / than men perceive, / the hart devours it from above / and the sides of it decay, / Niohogg is gnawing from below" (45). At end times, "Yggdrasil will tremble and nothing in heaven or earth will be free from fear" (87).

The United States celebrates competing stories about trees. In 1914, the Red River Lumber Company, Westwood, California, made mythic lumberman Paul Bunyan widely known via an advertising campaign.[23] Appearing at the height of American concerns about deforestation, Bunyan became a logging legend, a hero who could "fell whole forests with a single swing." The more benign John Chapman—Johnny Appleseed—sowed millions of seeds in Pennsylvania, Ohio, and Indiana.[24] Part missionary, part businessman, Chapman may have decided to peddle apple trees on the frontier while living in the mid-1790s in the Wyoming Valley, where apple orchards reinforced property claims made during the Yankee-Pennamite war. In 1796, he planted his first nursery near Warren, Pennsylvania, not far from where in the 1870s Peter Conlogue would enter the lumber business.[25]

Trees have other lives in the American imagination: as places of refuge, memory, and horror. In the novel *Beloved*, trees recall not only the beauty of the rolling hills of Sweet Home, a slave-worked plantation, but also the lynching and burning alive of would-be escaped slaves.[26] For Denver, daughter of former slave Sethe, trees double as sanctuary and dream space outside the confines of her home (28). Exhorting former slaves to love their bodies, Denver's grandmother, Baby Suggs, preaches in a clearing in the woods; answering her call, people emerge from among the trees (87–88). Sethe and Denver first see houseguest Beloved, a ghost child and a living memory, sitting on a butternut stump (50–51). On her back, Sethe bears welts that form a chokecherry tree, another physical reminder of slavery: scars from a whipping (16).

■ ■ ■

Whenever I hear chainsaws, my mind snaps to the myth of Erysichthon, whose name means Earth-tearer—or is it earth terror? A king of Thessaly, Erysichthon cut with his own hand a sacred tree in a grove of Ceres, goddess of agriculture. To teach him the senselessness of tearing down trees, she visited upon him a ravenous hunger that led him to sell his daughter to satisfy his famine. He ended up eating himself.[27] I hear hubris in Erysichthon's name. Cutting a tree, a representation of life, the king blasphemed the goddess who provided his people with food. Subject to his own hunger, he represents the unlimited desire of powerful people who believe in their own mastery of the world. The story reminds me that our behavior should have limits: we may want to reconsider mining in national parks, drilling on college campuses, and clear-cutting forests.

That the federal government houses the US Forest Service in the Department of Agriculture offers a clue about American attitudes toward trees. Setting a tone for the agency, conservationist Gifford Pinchot, first chief forester (1905–1910), flatly declared, "Trees are a crop, just like corn."[28] Describing trees as corn, oats, or wheat also characterized the thinking of many of his contemporaries. California lumberman W. B. Mills "urged that the forests [of the US] 'be looked upon as a big timber orchard, and care should be taken to gather its crop as we gather others.' "[29] And just as a farmer would harvest all oats or wheat in a field, so did lumbermen cut every valuable tree on a patch of ground. Unlike the farmer, though, lumbermen usually didn't replant. Logging, like coal mining, was about extraction; in neither business did people feel much pressure to renew the grounds they worked over.

Similar views held sway in Pennsylvania. As a student in Germany, Joseph Trimble Rothrock, first chief forester of the state, had absorbed the assumption that trees are for human use. An advocate of sustainable harvesting, he declared in 1895 more than 620,000 deforested acres of northeastern Pennsylvania a "menace to the prosperity of the Commonwealth." Twenty years later, little had changed; he divided the state into "prosperous" and "desolated" parts. "Desolated Pennsylvania," about a seventh of the whole, constituted "thousands of square miles" in the central section of the state that had been stripped of timber. He did not include even worse landscapes, "coal fields on which neither farms nor forests are found, but which already present so desolate an appearance as to suggest the inquiry: What is to happen there when the mining ceases?" No stranger to the Anthracite Region—he practiced medicine in Wilkes-Barre—Rothrock experienced firsthand the effects of plundering the place.[30]

Echoing fears of fellow Progressives, Rothrock predicted in 1915 that US timber stands would not last another thirty years. Few heeded his assertion. Assuming an "inexhaustible stock of timber," most people simply refused to see what was happening: we "shut our eyes to the fact that the end [is] approaching." For Rothrock, coal, a "non-restorable" energy source, was no option. A better answer, he declared, was to manage forests more efficiently, not to mention more profitably. It galled Progressives that 45 percent and more of trees cut in the nation ended up as unusable waste: trimmings, sawdust, and bark. In keeping with the spirit of the time, the doctor-forester argued that nature could not "be wholly trusted to do the work of reforestation." Presumably, nature needed professional foresters—people like him.[31]

■ ■ ■

To "guard the street planting of the city and prevent the haphazard system in vogue," in December 1915 Scranton established its Shade Tree Commission. Unpaid and poorly funded, three appointees set out to protect "shade trees from insect pests, to supervise new planting and in general to improve the appearance of the city." The three, however, had "some difficulty in impressing the public with the fact that no shade trees along the streets may be cut down or mutilated without their permission."[32] Exhorting residents in 1916 to plant trees to commemorate Scranton's jubilee, the commissioners noted that "strangers who come to the city and expect to find that we have dropped into the depths of the mines are surprised at the many beautifully shaded streets and avenues which we already have."[33]

In the same month that Scranton founded the Shade Tree Commission, Charlotte Perkins Gilman concluded her serially published utopian novel *Herland*, which depicts a highly managed, heavily forested nation made by women.

A widely known feminist, Gilman argued that a better world is possible only through strict management of places, animals, and people. The country she imagines, frightening in its efficiency, teaches us about stewardship run wild.

Hearing a "story about a strange and terrible Woman Land"[34] from which no man had ever returned (7), three men decide to find the place. Reaching it in a biplane—likely of spruce—the Americans extend their exploration on foot (8). Although they assume that their plane had scared off the "fair foresters and fruit gatherers" (16), the trio soon meet three women who laugh at them from high in a tree (16). In a reversal of the Garden of Eden story,[35] the arrogant Terry tries to lure them down with trinkets—"bait"—but one snatches his offering and drops to the ground, followed by the others, who run through the forest, laughing, pursued by the men, who must stop, breathless (18, 19). As they walk along, they cannot believe that such a beautiful place could have been made without men (21). In a nearby town, women subdue and anesthetize them (25). When they wake, their reeducation begins.

This involves not only learning the language, history, and geography of the country but also includes interacting with their captors. Only after the men have been "tamed and trained to a degree [Herlanders] considered safe" (73) are they allowed to know anyone beyond town. When these reeducation efforts are not entirely successful, the women rely on exile, which happens to Terry, a "man's man" (11) who tries to rape his Herlander wife (132). Terry makes it home, but for those with nowhere to go, as with the wild in Herland, exile is extinction.

The novel may advocate egalitarian relationships between the sexes, but it assumes a world that humans control completely. Having developed a capacity for virgin birth, the women practice as a means of survival the "fullest and subtlest coordination" of their isolated world (68). Just as Holland—another small, highly managed nation—fends off the sea, so Herlanders keep the wild at bay to maintain their "mighty garden" (78). Exerting a "conscious effort to make it better" (77), they tend to "their country as a florist cares for his costliest orchids" (20). Herlanders extend this "standard of perfection" (83) and "record of ever-increasing efficiency" (95) to growing trees: as Terry remarks, "Talk of civilization . . . I never saw a forest so petted, even in Germany. Look, there's not a dead bough—the vines are trained—actually!" (15).

In line with the wise-use philosophy of Gifford Pinchot and Joseph Rothrock, Gilman defines trees as crops. Despite their natural appearance, the Herland forests replace the original, natural ones, which the women "reset with fruit- or nut-bearing trees" (69), an act that narrator Van compares to "plowing up an inferior lawn and reseeding it" (80). Tending trees just as Progressive Era farmers might tend corn, Herlanders have created a "land in a state of perfect cultivation, where even the forests looked as if they were cared for" (13). Underscoring their determination to bend land to their will, Herlanders spent nine hundred years getting one tree to bear edible fruit (80). The Herlander rage for order, however, absorbs not only trees but also animals and people.

In Herland, all animals have been domesticated or destroyed: "There were no wild beasts in the country and very few tame ones" (51). As their population rose, the women got rid of cattle, horses, dogs, llamas, and sheep because "they took up too much room—we need[ed] all our land to feed our people. It is such a little country, you know" (49). They did keep cats, however, which they bred through the "most prolonged and careful selection and exclusion" to be silent (51). Their efforts also yielded cats that would not kill birds; instead, the animals were "rigorously bred to destroy mice and moles" (51).

Control of animals was one step away from control of people. When overcrowding became a major problem—when the nation confronted the "absolute need of a limit" (71)—the women decided to stop population growth (69). To accomplish this, they practiced "negative eugenics," which meant that each woman would birth only one child and that the "unfit" among them were "not allowed even that" (70). Whereas prior to this decree each woman had five daughters, now a young mother restricted herself to a single birth by simply "put[ting] the whole thing out of her mind" (72). When the population stabilized, Herlanders "recognized the need of improvement . . . how to make the best kind of people. First this was merely the hope of bearing better ones, and then they recognized that however the children differed at birth, the real growth lay later—through education" (61; see 112), a key part of which was that Herlanders "made it [their] first business to train out, to breed out, when possible, the lowest types" (83).

In September 1915, the month that Marywood opened, Gilman expanded her theory of education. For Herlanders, education, the "highest art, only allowed to [their] highest artists" (83), has been the primary means of "conscious improvement" (79), not of the individual but of the country, the "unit, a conscious group" (80). As if linking forest management and Progressive education, Van notes that in Herland the "children grew up as naturally as young trees; learning through every sense; taught continuously but unconsciously—never knowing they were being educated" (96). Unlike "dull, bored children" in the United States (108), children in Herland want to "keep on learning, always" (106), and they do so not indoors: "It was all education but no schooling" (107). A world "carefully prepared" to educate made every moment and activity a potential learning experience (108; see 103). Echoing Progressives like John Dewey, Gilman defines this as "education for citizenship" (109).

The experience of Ellador demonstrates that Herland citizenship does not embrace all creatures. Outdoors, the eleven-year-old catches a butterfly, an "obernut moth" (101). Her "insect teacher" makes this a teachable moment by greeting the discovery "with a little cry of delight" (101) and by explaining to the child that Herlanders had been "trying to exterminate [obernut moths] for centuries" (102). To place the find in wider contexts, the teacher offers Ellador a "history of the creature, and an account of the damage it used to do and of how long and hard [her] foremothers had worked to save that tree" (102). The child reacts with pride—"I grew a foot" (102)—and decides "then and there to be a forester" (102). This outdoors education, in fact, undoes the outdoors.

■ ■ ■

Marywood education began outdoors. On opening day, September 8, 1915, young women who assumed that they would study a text in their first class, an 11:00 a.m. English class, got a pleasant surprise when Sr. Immaculata "invited [them] out for a walk" and told them to "keep eyes and ears open." About paying attention, this initial lesson taught them to use their senses to know the world before the text. But, as they "admir[ed]" on their "beautiful walk . . . flowers, gardens and other picturesque attractions," they likely little noticed that the campus was a small, thin patch in a damaged land.[36]

How a university represents trees tells one a lot about how it knows itself. Typical of much college marketing, one full-color Marywood ad depicts attentive students sitting with open books on a swath of grass beneath an old shade tree, its leaves tinged yellow and orange, as an impassioned professor, standing in full sun with book in hand, expounds an idea. The scene suggests Socrates imparting wisdom and draws connections between learning and the outdoors that happen too infrequently, everywhere. Beyond these surface associations, however, Marywood treats trees as symbols of inconstancy, loss, and renewal.

Inside the Liberal Arts Center, only one rotunda mural, the *Mural of Christian Education*, depicts trees. Windblown and at the margins, a tree nods at the gold cross that a seated Lady Liberty thrusts aloft. A second tree, snapped at the height of Liberty's marble throne, morphs into a flagpole that tilts right, unfurling the Stars and Stripes just enough to form a red-white-and-blue field behind her arm. The toppled green that stretches behind her transforms into a garland. Symbolizing nature reduced to decoration, the broken tree enhances the mural's portrayal of divine reason as the one constant in the face of change.

Trees in the *Mural of Christian Education* remind me of the conflict here at the heart of liberal arts education. When Marywood expanded beyond the motherhouse, it built the Liberal Arts Center where a "flourishing orchard" once grew.[37] Cutting fruit trees to erect a building dedicated to the study of books that explore the human condition following the Fall replays the Fall itself. In the Garden, to eat forbidden fruit was to know good and evil. In the remains of the garden, the liberal arts provision us to navigate, maybe, what we've learned, or need to learn, about good and evil: to limit our desires even as we reach beyond our grasp.

The Marywood Alumni Association recently nodded to trees at "the Wood" when it adopted a "new rallying slogan," "Forever Green," which "means we are living the Marywood experience throughout our entire lives . . . we are always, at every point in our lives, part of something memorable, magical, and meaningful. We are empowered, individually and collectively, by the notion that we are 'Forever Green.' " The slogan echoes in odd ways: Marywood alumni are ever alive, environmentally aware, and inexplicably innocent. In color, the slogan, like the university seal, uses gold to distinguish forever—gold eternity—from green—the natural world—replicating a unity—and hierarchy—of supernatural and natural.[38]

The world, however, long ago undermined this distinction. Charles Darwin sketches a tree to describe evolution in *On the Origin of Species* (1859). Likening the growth of "the great Tree of Life" to the unfolding of generations of creatures, Darwin imagines that the tree's "buds give rise by growth to fresh buds, and these, if vigorous, branch out and overtop on all sides many a feebler branch." As the tree "covers the surface [of the earth] with its ever branching and beautiful ramifications," it also "fills with its dead and broken branches the crust of the earth."[39] Darwin's diagram and description, above all else, convinced readers of his arguments.[40] His surface and subsurface analogy appeared just as anthracite mining began to remake Lackawanna Valley forests into a patchwork of woods, mines, and towns.

■ ■ ■

Coal breakers and culm banks dominated company-owned villages, or patches. The relationship was straightforward: patch people fed the coal breaker that fed them and that, many times, broke them. The relationship was also hierarchical: the breaker, towering over the land, asserted coal company power. Huddled in the breaker's shadow, the patch pooled labor that the system demanded. Belowground, men hewed catacombs that both promoted and undermined their hopes for stability.

Poverty stalked patches. In company-owned villages, workers and families bought what they needed at company stores, often enough falling into debt, which meant that underage sons went to work as breaker boys. Unlike in free towns, "usually incorporated governmental entities," companies also "controlled access" to patches and surrounding lands. Some operators even stationed coal and iron police in "possession houses" on undeveloped property to deter trespassers. Conditions within patch houses were less than ideal. A 1916 company inspection of a home in Eckley, a patch near Hazleton, described missing clapboards, a leaking roof, and a sagging floor; the report concluded, however, "This building serves its purpose."[41]

When profits fell, some patches simply folded. Edgerton, just north of Scranton, fell apart when the coal ran out. In other cases, companies shuttered towns. For example, in 1936 Pennsylvania Coal Company served one-year eviction notices to everyone in the patch at the Underwood colliery, which the company had built in 1910–1914. Housing about 250 people, Underwood Village, a "model town," consisted of eighteen double homes for families of miners and five single-family homes for mine bosses. The community's single street divided not only Olyphant and Throop boroughs but also labor and management: miners lived on the Olyphant side; bosses on the Throop side. Although many village men retained jobs at the colliery, Underwood's "close-knit community" died with the diaspora to nearby towns. When the colliery closed in 1953, the company laid off about three hundred workers.[42]

Visiting the region in June 1902 as a correspondent for *Everybody's Magazine*, novelist Frank Norris explored mine patches from Wilkes-Barre to Hazleton. Unlike Stephen Crane, who investigated Scranton underground in 1894, Norris stuck to the surface. In "Life in the Mining Region," he juxtaposes time and place, seen and unseen; the subtitle and headnote of the essay point out that he wrote the piece "on the spot" during "strike-time."[43] Beginning his tour in peaceful Wilkes-Barre, in the northern field, where the industry had been company dominated from the start, Norris wonders at first why there is this "strike of almost unprecedented magnitude" (243). To mark that he writes about revision, he refers to trees to note readjustments of his "mental camera" (241). The "shade trees" (243) of Wilkes-Barre, which give way to "dead pine trees" near Hazleton (247), become the no trees at Melonsville, where seeds have, however, sprouted a red-flowering one.[44]

Norris brought to Wilkes-Barre "vague and terrible ideas" (241) about the strike that he had absorbed, much like his readers, from the "partisan press" in New York, headquarters of many anthracite operators (246). Expecting to see "mass meetings . . . patrols about the mines, [and] incipient riots" (241), he finds only calm in the "totally unexpected panorama . . . [of] a very beautiful valley rimmed and bordered with hills, mostly under cultivation" (242). The city, "one of the chief storm centres" of the strike (241), offers, other than idle breakers, no "visible evidences" of "one of the greatest strikes of modern times" (242). Disappointed, the novelist searches further, only to discover that "nothing of dramatic value had occurred . . . Everybody, everything, was merely waiting" (242). In the absence of conflict, he could read no "Great Meanings" in the scene (242).

The "first radical readjustment of the camera," however, clicks as Norris observes the homes of miners (243). The houses are not, as he had anticipated, "hovels, shanties, [or] dreadful hole-in-the-wall places"; rather, they are "really charming little suburban residences . . . set in bowers of shade and of honeysuckle, with . . . well-groomed lawns" and "shade trees" (243). That miners owned their homes—and perhaps one or two more—further surprises the writer, who was primed to discover dilapidated company housing (243).

Norris can hardly believe that miners, men that his New York script characterizes as "uncouth and grimy, down-trodden and persecuted," spent strike time "tinkering in their gardens, painting their houses, [and] mowing their lawns," much as his white-collar, middle-class readers might (243). Seeing miners mow lawns, "surely an incongruity" (243), undercuts his assumptions about colorless mine patches. Keeping a lawn suggests, after all, an interest in aesthetic spectacle and some time to enjoy the view, characteristics that Norris associates more with mine owners than with mine workers. Then again, this part of everyday nature obscures the work that keeps it,[45] a fact consistent with the surface-subsurface motif of the essay.

After revising the story he had brought with him from New York, Norris revises it again when he visits Hazleton. Although he left Wilkes-Barre with a "pleasant feeling," due to the "fine sunshine and the prospects of the beautiful Wyoming Valley," his emotions abruptly change. In Hazleton, he confronts a "sensation . . . of different conditions, of different ways and means and modes and manners" (246). Contributing to this "different atmosphere" (246), the weather turns "cold; overhead the sky stretched out gray, lugubrious, lowering" (247). In a chill rain, Norris discovers outside of town how mining can destroy surface life: coal dust chokes a marsh where stand "dead pine trees, denuded of needles, spectral, osseous" (247).

A company patch near Hazleton forces Norris to again revise his view of the strike. To signal this change, he uses similar phrases to begin and end a description of Melonsville: a sharp contrast to Wilkes-Barre, the village is the "obverse of the shield" (247)—the "other side of the shield" (248). With "light already waning" (248), the writer finds living conditions in Melonsville that make him wonder why the strike is not more violent. Countering the truth of his double revision, his story of this coal patch, not coincidently, circles back to the partisan press story he originally reworked.

Shadowed by five culm banks that form a "grim amphitheatre" (248), Melonsville rests on a "flat hill-top as bald of green growth as the middle of Broadway" (247). No grass, no trees; "houses built of sheet-iron" and "scarcely a soul in sight" (248). Center stage stands the coal breaker, "monstrous, dilapidated . . . inky black with dust, the boards warped" (247–248). To emphasize that the village is uniformly ugly, desolate, and dead, Norris points to what lay just beyond it: a "great forest-world, beautiful, green, thick with odorous and abundant life" (248). Despite the nearby woods, patch people breathe no "breath from the forest" nor feel a "touch of unpolluted air" (248). Hemmed in by culm banks and a "smoking ash-heap," residents see and breathe differently only underground, in the "change from the surface to the shaft and tunnel, to black darkness and burrows cut in walls of coal" (248). Alluding to spectacle, the amphitheater and the nod to Broadway underscore the poverty of the patch—in wealth and experience—the obverse of the relative riches of readers.

In its "meanness . . . and execrable maddening dreariness," Melonsville stands as "a Truth, a Fact, a Thing Seen" (248). In "Life in the Mining Region," readers see only the shape Norris gives to what he saw, which was shaped, initially, by what he had read and heard. Representations of experience, the essay and its accompanying photos may offer a "candid statement of conditions," but they do so only as versions of the truth, which, Norris suggests, is a string of juxtapositions that threaten to undo each other: Wilkes-Barre and Melonsville, miner and operator, surface and subsurface, experience and narrative, word and image.

Norris did find one tree in the patch. If readers will "look long enough at Melonsville," they will see it, too: bearing a "red flower," the tree of revolution is sprouting in "just such 'culm-banks' and ash-dumps all over these United States" (248). Producing a "heady" sap and a "poison which is as swift to act as it is sure to slay," the tree threatens to grow beyond efforts of "law-givers and Governors" to "prune and trim" (248). That the tree blossomed over the summer of 1902 may be why the federal government intervened—in a first—to negotiate a settlement.[46]

On October 21, 1902, the strike ended.[47] An arbitration commission later awarded miners pay increases and a shorter workday, but not union recognition.[48] On October 25, Norris died.

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Although many mine-scarred sites in the Lackawanna Valley have been reclaimed—leveled and planted to grass—attempts to restore local lands through reforestation have sometimes not worked. Sculptor Harriet Feigenbaum had an especially tough time in the early 1980s making visible her narrative of renewal in Scranton. At the abandoned Storrs colliery, former workplace of George Bowen, she tried three times. Her environmental artwork turned out to be as transient as the poems that Bowen wrote on coal.

Seeking to restore stripping pits to a "structurally safe land capable of supporting life," Feigenbaum envisioned art installations that "focus[ed] on reforesting the land rather than on moving and shaping tons of waste material into geometric or terraced formation." Planted in April and May 1983, *Valley of 8,000 Pines*, which was to help prevent soil erosion, echoed a "well-known commercial photograph of a coal train snaking its way down a mountainside." Four thousand white pines and four thousand Austrian pines followed in "undulating rows" the "pattern of the coal seams underground." Feigenbaum foresaw her design giving way to natural processes. As the trees grew, they would close gaps between them, creating "fuzzy etched lines—lifelines . . . a positive reversal of the gouged scars inflicted by strip mining." Her work never had a chance: dirt bikers destroyed it.[49]

Her second attempt died before birth. Designed to become a "spiraling configuration" of trees, *Black Walnut Forest* never got off the drawing board. The forest, sited at one end of a meadow, was to radiate "lines toward the spiraling inner sanctum." Although the Department of Environmental Resources graded land to create the meadow, the artwork itself was never funded. Feigenbaum may have intended to begin a "rich dialogue between past and present" and person and place, but too few people participated. Her third attempt also went unfunded. Perhaps too many of us are not interested, unfortunately, in an aesthetic event that reforests a place, responds to soil erosion, and "intensifies our experience of the land."[50] Or maybe we don't want to pay for it. But, at this moment, in this place, we cannot afford to forgo such ideas.

Feigenbaum did successfully plant two contributions to the dialogue at the former Greenwood colliery in South Scranton: *Willow Rings* and *Greenwood Colliery Sundial*. Functioning "as if it defines the site of a ritual no longer understood," *Willow Rings* unwittingly comments on how some local residents relate to place. Too many Scrantonians know as little about their contributions to soil erosion as they do about the city's checkered environmental history. The project survives mainly because it is part of a wetland. "Located above an underground mine," *Sundial* tells time with a "slender steel needle mounted on a perforated steel wheel." Pointing to local patches of time and place, the artwork includes squares of plantings that echo lumps of coal.[51]

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At Marywood, tree plantings symbolize efforts to renew the face of the earth. IHM sisters likely planted trees early on to show how campus grounds differed from the surrounding mine-scarred land.[52] As they watched second- and third-growth woods disappear from the Lackawanna Valley, the sisters battled coal companies for control of damaged lots, which the school acquired and restored with seedlings. The grove, however, concealed a deeper, older grove, pillars of dead Devonian ferns and props of Holocene hardwoods and loblolly pines, brought below to stand in darkness. These ghost trees haunt the Liberal Arts Center, which overshadows, among others, the Judas tree that grows against Immaculata Hall.

Plantings extend now to more than one hundred species. An arboretum since 1975, the campus preserves a wide range of trees, native and nonnative.[53] In front of most, a lectern-like stand gives the tree's common and scientific names. Each sign looks like it waits for someone to lecture the tree, but the stands should be reversed: trees have much to teach us. They might explain what has been gained and lost in transforming this land from hardwood forest to farm, to colliery, to golf course, to college.

Wild trees, which mark the north and east edges of campus, remind us of our ignorance. Beyond our complete understanding, they model how the natural world orders itself, a pattern that humans have too often ignored. To experience a standard beyond us by which to judge our behavior, we need these wild, "sacred groves—places we respect and leave alone, not because we understand well what goes on there, but because we do not."[54] The wildness within these places serves as the "ultimate definer of our possibilities," an "essential measure of our history and behavior."[55] At Marywood, wild stands mask the ruled surface of Interstate 81.

The arboretum makes visible that Marywood defines respect, an institutional core value, as, in part, "caring for the earth and all creation."[56] That the university enacts this respect in a spirit of "responsible stewardship"[57] raises moral and ethical questions about the extent of human management of the natural world. Stewardship places people apart from nature, putting them in the position of making choices for the rest of creation, a power that has often gone wrong: clear-cuttings, extinctions, erosion. What happens when—as now—the planet needs protection from people? But should people not act to protect places? If they should, how should they?

THREE

Fire

▪ ▪ ▪

Go forth and set the world on fire

Ignatius of Loyola, “Ignation”

Outside, it’s four below; with the wind chill, minus seventeen. Inside, it’s sixty-six. I remember that a small, blue pilot light in my furnace separates me from frostbite. Radiators hiss that my comfort—if not survival—depends on firing natural gas to boil water. Of course, the house used to burn coal; pieces turn up in the basement every so often. The cinderblock coal room now stores flowerpots and garden tools.

At the farmhouse, basement walls were laid-up fieldstone, coated in coal dust layered from years of pulling ashes from the stoker. In the far corner glistened a heap of coal, which had long ago choked the indoor well. The cellar predated anthracite heat.

When I lived at the farm, the fire in the furnace would sometimes die, dropping the temperature upstairs, filling the place with coal gas, a potential killer. Rekindling the flame was never easy: I’d cut splinters with an ax, pile them in the firebox, light one to light the rest, and flip a switch in hopes of a blue flame.

Trouble lighting anthracite almost snuffed out the industry before it started. First attempts to sell the coal often failed because people had no clue how to burn it. In 1812, Philadelphians, enraged that the stones would not fire, pursued a coal vendor, threatening to lynch him. Frustrated, people resisted the coal, which meant that someone had to show them that such hard material could burn. To make money, anthracite boosters had to teach a wood- and charcoal-burning public the “specific skill set” that ignited the stuff.[1]

■ ■ ■

Prior to the mid-nineteenth century, most urban Americans burned wood to heat homes. The more firewood they bought, though, the more their supplies moved farther from where they lived, which led to periodic fears of wood famines. An early fall, a severe winter, or a late spring meant more logs on the hearth. Workplaces that required heat—iron furnaces, foundries, blacksmith shops—also depended on trees, often in the form of charcoal, or they burned bituminous coal. Before the War of 1812, Philadelphia imported Virginia bituminous and coal from Ireland, Scotland, and Wales. When British ships blockaded US ports, industrialists in Baltimore, Philadelphia, and New York—feeling the pinch of a fuel crisis—turned for relief to anthracite. Philadelphia investors saw in local coal not only a good chance to dominate East Coast fuel markets but also the possibility of undercutting foreign competitors.[2]

With attention shifting to anthracite, businessman Jacob Cist launched a writing campaign to teach people about hard coal. In addition to newspaper articles, in 1815 Cist published a widely circulated pamphlet that focused on convincing blacksmiths to burn anthracite; his efforts met with “mixed results.” Stone coal won a few converts, but peace led most smithies to return to cheaper bituminous. A little pricey, anthracite was good, but most had not worked with it long enough to swear by it. The tireless Cist also reached out to factory owners, arguing that burning anthracite improved working conditions, saved money, and “assured a clean environment.” Burning hard coal, he asserted, would keep Philadelphia from becoming London, which choked on smoke from soft coal.[3]

In 1814, anthracite won over wire makers Josiah White and Erskine Hazard, who accidently discovered how to light it. After a long night trying to ignite the coal, workers shut up the factory furnace and walked home, disgusted. A crew member who returned to retrieve his jacket, however, found the furnace white hot.[4] Seeing the possibilities, White and Hazard bought a mine and coaxed Philadelphians to burn anthracite, not wood, which was becoming ever more scarce locally.[5]

In the decades to follow, anthracite gradually displaced wood as the preferred fuel for urban home heating and manufacturing. Better stoves, increased accessibility, and knowing how to kindle it led Philadelphians to turn from firewood to hard coal in the 1840s. By 1860, anthracite met 90 percent of home heating needs in Philadelphia and 85 percent in New York.[6]

Switching from firewood to anthracite may have saved some trees, but it did not stop forest fires. With home heating moving from cutting and burning recent trees to mining and burning petrified ones, collieries dug deeper to satisfy demand, which meant that timbermen stripped ever more trees from the surface to send underground. Denuded, cutover grounds near coal mines quickly grew to brush, which burned, again and again.

By 1915, felling forests—for construction, mining, and the rest—sparked so many fires that Pennsylvania established a "fire prevention and control" system that it expanded in 1920 into "district organization."[7] Moving from wholesale cutting to sustainable growth meant educating the public about forests and ways to prevent fires. A few months after the creation of the Bureau of Forest Protection within the Department of Forestry, the state's foresters gathered in Potter County in August 1915 to officially endorse establishing a publicity bureau to teach Pennsylvanians about forestry.[8]

As part of its education campaign, the new department funded a film about fighting forest fires. The two-reel picture contrasted the traditional, haphazard way of fighting fires with a more efficient, modern method. While making the movie, the chief forester at the Mont Alto forestry academy started a blaze that quickly burst out of control. With flames shooting across treetops, academy students had near-death experiences as they jumped for cover. One man, forced to run through the flames, ended up unconscious, and the cameraman, after capturing close-ups of others fleeing, also ran for his life. Starring students-turned-actors-turned-firefighters, the film of the staged fire made real was released in 1916 as *The Curse of the Forest*.[9]

The curse especially plagued the six main anthracite counties—Carbon, Columbia, Lackawanna, Luzerne, Northumberland, and Schuylkill. Between 1913 and 1942, twenty-eight thousand forest fires scorched the region, destroying a staggering 37,900 acres. The fires torched 23 percent of burned forest acreage in the state, in an area that constituted only 9 percent of the state's woodland. No wonder fire was for years the "chief enemy of the Anthracite Forest."[10]

■ ■ ■

Self-consuming, fire protects, lights, warms, and kills. A maker and a destroyer, it separates and conjoins. That it is the gift of a god suggests that it possesses powers beyond our control. And, in our use of it, fire often escapes us: houses, forests, and coal mines burn. We deploy it, however, too often without thought, too often unmindful of the consequences. To think about fire, its help and harm, is to remember Prometheus, the fire bringer, who saved humanity in unsettled times among the all-powerful.

In a war for supremacy among the gods, Prometheus begs his Titan siblings to know that their brute force would never defeat the rebel Olympians; to triumph, he argues, the Titans would need cunning, a quality he had. When no one hears him, Prometheus betrays his family to join Zeus, leader of the revolution.

To topple the Titans, Zeus lures a few more to his side, promising to free them from their confinement underground. At the final battle, an unfettered trio of Titans hurls stones at their former brothers, while Zeus strikes with thunderbolts, "forming a solid roll of sacred fire" that burns fields and forests. The ten-year war ends with the Olympians triumphant. Zeus forces the defeated Titans underground, "as far below the ground as the ground is below the sky." There they lie chained, imprisoned behind a bronze moat and "three thicknesses of night," guarded by the Titans-turned-traitors.[11]

Flush with victory, Zeus directs Prometheus and his brother Epimetheus to create animals. Mixing earth and water, Prometheus makes man in the likeness of the gods, giving him an "uplifted face," an erect gait, and an eye to the heavens.[12] Epimetheus, charged with assigning attributes to all animals, gives away every trait before turning to humans. To undo this thoughtlessness, Prometheus steals into Hephaestus's workshop and filches fire from the Olympian's forge. In bestowing fire upon men, the Titan brings them from "sunless nooks of subterranean caves"; teaches them the arts of farming, writing, and mining; and offers them "blind hopes" to quell fears of death.[13] Armed with what they know, men mingle among the gods, meeting them face to face. Zeus would have none of it.

Emboldened, Prometheus seeks to help humans further by ensuring that they would always receive the choicest parts of all sacrifices. At a meeting called to settle a dispute about the relationship between men and gods, Prometheus divides the sacrificial ox, hiding meat in skin and wrapping bones in fat. He gives the meat to men and the bones to Zeus. Accepting the offering, despite seeing through the trick, the supreme god, already plotting against people, uses the moment to subject humanity utterly to his will: in revenge he snatches back the "all-consuming power of fire." Not to be outwitted, Prometheus steals it again, but at the cost of his own freedom. The master of lightning, enraged that humans still hold a spark of his power, tosses the Titan on a mountain crag, binds him in unbreakable chains, and drives a stake through his middle.[14] There he is to stay, for eternity, deathless, on each day a "blood-red eagle" tearing out his liver, which renews itself each night.[15]

■ ■ ■

Absorbing carbon dioxide from the atmosphere, trees “lock away roughly 2.4 billion tons of solid carbon,” which equals about “one-third of total man-made CO2 production.” Forest fires release this carbon, which traps heat in the earth’s atmosphere. Accelerating climate change, this deforestation may amount to a “staggering 20 percent of total greenhouse gas emissions.” Burnings in tropical forests alone have added to the atmosphere 30 percent of its carbon total.[16]

Sadly, lighting our way blinds us to our own ends.

Nations meet to talk about climate change. Governments promise to do what they can. First-world nations demand that emerging nations tighten pollution controls; emerging nations call on first-world nations to pay for damage done. All complain that they can afford to do nothing other than what they have already attempted. Although leaders sign agreements, follow-through is less than certain. When nations meeting in Japan in 1997 pledged to reduce carbon emissions, the United States refused to ratify the pact, the Kyoto Protocol. The 2015 Paris Agreement, the first global accord, may promise to reduce greenhouse emissions, but it imposes no penalties on nations that cannot meet targets.[17]

As far as I can tell, most Americans express little outrage or urgency about global warming, even those who agree that the menace exists. Government officials offer no sustained, concerted response, apparently because the situation has not become a widely visible crisis. When they do try something, their efforts get mired in red tape, receive inadequate funding, and start up only to stop short. Meanwhile, politicians argue that climate change is not as dangerous as scientists claim, and the person in the street strides along, adhering to a faith that the problem, if it is a problem, can be contained and the fire extinguished.

Meanwhile, the world burns.

At the poles, glaciers melt at an alarming pace, breaking up massive ice sheets. Rising sea levels inundate shorelines; the government of the endangered archipelago of the I-Kiribati, for example, plans to relocate residents to Fiji.[18] Trees are migrating; animals are on the move. Summers heat up; droughts linger. Superstorms devastate coastal cities.

Despite the damage, people have no problem making climate-related disasters a spectacle. The tourism industry took advantage of hurricane destruction in New Orleans to run buses of camera-wielding gawkers through ruined neighborhoods.[19] Selling secondhand suffering, disaster tourism also touts the urgency of visiting places before they disappear. People scurry to see scarce polar bears, low-lying islands, and narrowing beachfronts. One company, Disaster Tourism, links its web site to the list "Top 10 Natural Environmental and Anthropogenic Disasters." The first is Bhopal.

Since 1880, a period that roughly coincides with the rapid acceleration of industrialization, global temperature has risen 1.4 degrees Fahrenheit; the earth's surface temperature in 2013 was 1.1 degrees Fahrenheit warmer than in 1950. Burning fossil fuels—coal is the worst offender—pumps into the earth's atmosphere carbon dioxide, which traps heat and creates a greenhouse effect. Not coincidentally, carbon dioxide levels are greater now than at any moment in the past eight hundred thousand years.[20] Despite cries from some people that global warming cannot be attributed to human activity, 97 percent of climate scientists, maybe more, agree that we are torching our home.[21] Why we refuse to admit this, why we refuse to act before it is too late, is a major problem. It is not, however, a new problem.

If burning coal contributes to global warming and if anthracite, as so many say, ignited early US industrial expansion, then it is fair to say that a portion of our climate troubles originated in the Lackawanna Valley.[22] The brief burn of prosperity here piled a lot of ash before it guttered out, leaving the place hollow and depressed. To know how the fossil fuel story will soon play out on a global level, study northeastern Pennsylvania, where land burns, where anthracite, the "cleanest" coal, smolders beneath the surface.

If we deal with climate change the way that we have dealt with abandoned mine fires, we are in serious trouble. An abandoned mine fire was too often dismissed as someone else's worry. More often than not, no one would take responsibility. Meanwhile, those most affected, usually with little choice, adapted to life in the fire zones, and local officials cowered before price tags to stop the burning. State and federal officials responded slowly, if at all, at least until problems became crises.

■ ■ ■

Putting out a mine fire is not easy. Coal ignites at temperatures between 788 and 896 degrees Fahrenheit; under certain conditions, it can smolder at much lower temperatures, between 95 and 284 degrees Fahrenheit. Requiring scant material to burn, fires in abandoned mines need little oxygen; the presence of even 2 percent of the gas can keep them ablaze. And coal seams can burn for a few days or a few centuries: one fire in Australia has been burning for two thousand years. Unpredictable, mine fires shift direction, vary in size, and lie dormant long before flaring up.[23]

A constant burning, an abandoned mine fire eats time and place. Unfolding out of sight, the fire makes itself known to surface dwellers usually as wafts of smoke by day; at night, at best, a blue glow. Yet, unseen, mine fires spew carbon dioxide, a greenhouse gas. The contribution that mine fires make to global warming is small but significant.[24] Coal mining in the Lackawanna Valley has ended, but the place itself keeps warming the planet.

Companies did all they could to fight mine fires, which threatened their bottom lines, if not their very existence; for help preventing them, they called on scientists, engineers, and miners. Fires in active pits they usually put out; blazes that kept burning mostly started in abandoned tunnels. If not fought immediately, any fire could run out of control. Best efforts to end them not only did not work but also sometimes spread the flames. Using water frequently fed oxygen to a fire, pushing it farther along. If a blaze burned long enough, it could imperil towns and cities, which in northeastern Pennsylvania are often enough located directly above coal seams. When threatened, residents rallied for redress, demanding that companies fight the fires. When this didn't work—and it usually didn't—they appealed for aid to elected officials, who, for much of the twentieth century, refused help.

Setting a pattern, an early twentieth-century blaze in Carbondale, ten miles north of Scranton, wreaked havoc on the Canaan Street section, beginning in 1902. The fire erupted in one of the first mines in the northern field. Residents complained of fumes, surface settlings, and damage to property values. Locals outside the fire zone, however, who may have been "occasionally annoyed by the fumes," were never more than "only mildly interested" in the blaze, which may be because, as one observer noted, "men will endure with comparative calm any injustice, provided it continues long enough for them to get used to it and the injury it works is borne by some one else."[25] The trouble with indifference is that fire zones widen.

The blaze burned for another four years before two hundred neighbors staged a rally to demand that the coal operator lay out a plan to deal with it. Owners of the site promised to keep the fire from spreading. Two years later, however, in 1908, fumes from the fire, which had burned by then twenty acres of coal, forced residents from their homes several nights running; the situation was so bad that they appealed for help from the state board of health. A year later, the Pennsylvania State Supreme Court ruled that it made no sense to force the now-bankrupt coal company to extinguish the fire; instead, the judges suggested, the city should take responsibility. The city refused, claiming that it had neither the money nor the expertise to fight the inferno, a position the high court confirmed. The state department of mines and the state department of health then cited their lack of authority to intervene. With nowhere else to turn, residents petitioned the federal government, which offered nothing. Meanwhile, in June 1910 the fire broke the surface.[26]

In 1913, two years after a legislative commission recommended that the state appropriate money to fight the fire, the governor vetoed the idea. Not a month later, a six-year-old boy at play in the fire zone "broke through the surface over the blazing coal and dropped helpless to his arm-pits. Companions rescued him, but not before his legs and the lower portion of his body had been painfully burned." Despite this incident and despite surface temperatures high enough to bake potatoes, no one launched a major effort to kill the blaze.[27]

After enduring years of refusals from every level of government, residents of the affected area pooled their resources to excavate the fire themselves: they hired a steam shovel, which began work in early October 1919.[28] The effort failed, however, as did attempts to contain the fire. In 1933, more than thirty years after it began, bootleg mining operations burst the blaze into "renewed activity"; horrified homeowners discovered "flames shooting from the earth." Likely cold comfort to folks in the fire zone, visitors marveled at the "red-hot rocks, steam, and flames [that made] the fire tract an unusual sight at night."[29]

A similar pattern unfolded at Laurel Run, a working mine near Giants Despair, outside of Wilkes-Barre. A fire there began on Christmas Eve 1915 when a "miner left an open-flame lamp hanging on a timber prop." Coal companies spent millions to put it out, without success. In 1922, surface settlings exposed the fire, offering to thousands of visitors a "picturesque appearance, with sulphur gas issuing in large volumes from the craters . . . which lend the appearance of a volcanic eruption." After fumes began seeping into homes in 1963, the borough took up the fight. But digging out the fire was impossible because the blaze was eating coal "from the top vein to the bottom seam, some 300 feet below the surface." With carbon monoxide endangering 160 families, a state official asserted that the only way to kill the fire was to wall it in and let it burn. Despite years of multiple attempts to extinguish the blaze, in 1965 more than 160 homes were demolished and the residents relocated. Four years later, the fire raised ground temperatures to a thousand degrees, so high that people who remained could get only hot water from faucets. The burning was so deep and so hot that officials ultimately decided that it was just "too expensive to control." That fire burns today.[30]

■ ■ ■

The youngest of four, my mother was not yet a year old when the Canaan Street fire broke ground in 1933. Living on the west side of Carbondale, the opposite side of town, my grandparents likely felt far removed from danger. Struggling through the Depression, life on Devine Avenue was tough enough. Their Irish and Italian neighborhood, working-class, tight-knit, knew what a mine fire could do, but no one thought it would happen in West Side. In 1949, though, a fire in a nearby stripping pit jumped from garbage to coal. By the early 1960s, the fire had decimated the neighborhood.

Early on, West Siders knew that a mine fire burned at the top of the hill, but few worried about it. Only after gases killed a retired couple asleep in their home did folks take notice. As the fire crept closer to Devine Avenue, more people felt its effects. A block from my grandparents' house, the fire ate support pillars enough to collapse a backyard, nearly killing the homeowner and his son. Closer still, carbon monoxide almost killed the woman across the street; after entering her basement to feed the furnace, she barely made it back outside.

Inspectors checked cellars for gas at least twice a day. My mother recalls evacuating the house only once, for an evening. In their front yard, boreholes vented mine gases. Steam rose from the street, and the rotten-egg smell could be bad. All winter, they slept with the windows open.

Despite this, my mother remembers feeling no fear: "It was just everyday living." People worked and worried about the usual things, and few wanted to move. Most declared that they would take their chances.

But the fire threatened the entire city. After futile attempts to stop it, local officials asked for state help to dig it out, which meant that everyone had to leave the fire zone. Wielding eminent domain, the government seized homes, paying minimum prices. Among the last to go, my grandparents, my mother, and my two half brothers moved to Pittston Avenue, on the south side of Scranton, where a year or so later another mine fire erupted.

■ ■ ■

After isolating Prometheus on barren rock, Zeus takes his revenge further. People could keep the blessing of fire, but the Olympian adds to it the curse of Pandora and her jar of evils.[31] Full of afflictions, the jar bears the dark side of fire: bringer of light and heat, it also melts the civilization it forges. Beating plowshares into swords is only one example. To cope with this ambivalence, we make means to lessen our suffering; we fight fire with fire.

But Pandora also brings with her curiosity, which, although it releases hardships into the world, also equips people to survive them. A desire to know spurs humanity to improve its lot by enhancing the tools that Prometheus taught them to use. In an imperfect world, curiosity enacts hope, all that remained in Pandora's jar.[32]

Encouraging limitless possibility, hope prods people to look toward a promising future. But then again, it papers over the fact that life ends. Why hope when all eventually ends in dust? Or is our power to hope despite death?

Zeus had hopes to rule forever, but binding Prometheus puts him in a bind: the Titan knows a secret that could end his reign. Revealing the secret would free Prometheus, but he refuses, defiant, despite his pain redoubled. Without the release of death, the Titan can only suffer, endure, resist. The more the tyrant demands to know, the more adamant Prometheus grows: "To me is Zeus a thing of no account . . . he shall not rule for long."[33] In refusing to save himself from an undeserved fate and for prolonging his agony against tyranny, Prometheus has earned hero status among people who fight oppressors.[34]

In "Prometheus" (1816), Lord Byron describes the Titan as the hero of humanity.[35] Unlike the other gods, the "immortal eyes" (1) of Prometheus see the "sufferings of mortality, / . . . in their sad reality" (2–3). His pity, which moves him to help, costs him "silent suffering, and intense; / The rock, the vulture, and the chain, / All that the proud can feel of pain" (6–8). Punished for kindness, for helping to lessen the "sum of human wretchedness" (37) and to "strengthen Man with his own mind" (38), Prometheus, deathless, has no hope, however, that his own suffering will end. His single consolation: to stymie Zeus, merciless tyrant, who has no power to break the Titan into giving up his secret (30). Using silence as his only weapon, Prometheus shakes the confidence of the "Thunderer" (26) enough "that in his hand the lightnings trembled" (34). Prometheus's "patient energy" (40), "endurance" (41), and "impenetrable Spirit" (42) offer us a "mighty lesson" about our "fate and force" (44, 46). Like the Titan, we are "in part divine" (47), and we "can foresee / [our] own funereal destiny" (49–50). Despite our suffering, though, we resist our end, and, "equal to all woes" (54), our spirit, "triumphant where it dares defy" (58) makes "Death a Victory" (59).

■ ■ ■

On Memorial Day 1962, a garbage fire in a former stripping pit ignited a coal seam in Centralia. A "worst-case scenario," the Centralia story has haunted every subsequent mine fire in northeastern Pennsylvania.[36] A preventable disaster, one that could have been stopped when it started, the fire pushed people out, left and right, slowly, until, all of a sudden, almost everyone was forced to flee.

The fire still spreads. Since the day it started, the blaze has advanced, on average, twenty to twenty-three meters per year, underground. A largely unseen danger, the fire has broken the surface only twice, in 1981 and 1983, each time outside of town.[37]

Government responses to the fire were "confused and disorganized." Despite knowing immediately that they faced a major problem, borough officials sought no outside help. Not until July did town leaders admit that the blaze was beyond them. Called to the scene, state and federal officials determined that the fire could be dug out at a cost of $30,000. When they asked the two coal companies that owned and leased mineral rights at the dump to split the bill evenly, each refused, disclaiming responsibility. By 1969, the price to excavate the fire had jumped to $4.5 million. An attempt to contain the blaze with a less expensive underground fly-ash barrier failed. In 1971, federal and local governments fumbled another chance to end the fire when Columbia County could not match a $25,000 federal offer to dig it out. Ten years later, in response to worries about lethal gases seeping into homes, officials advised residents to open their windows.[38]

The ambiguous nature of the fire shaped how Centralians reacted to it. Few could be sure whether it was a threat or an annoyance. Was it widespread or concentrated? Was it burning in town or outside of town? Where was it moving? How fast was it spreading? Can it kill people?

In-town attitudes about the fire varied. Former miners, familiar with underground workings, expressed little concern. Other residents simply accepted the fire as part of life in a coal region. Some denied that it was a threat, and, despite the constant presence of steam and a rotten-egg smell, most Centralians either ignored it or treated it as an inconvenience. Others prayed for a miracle or put their trust in official efforts to stop it.[39]

The situation changed on Valentine's Day 1981: a twelve-year-old boy disappeared into a sinkhole. Clinging to tree roots, dangling in 135-degree heat, he screamed for help until his cousin snatched him to the surface. With carbon monoxide levels in the pit beyond the scale of gas detectors, a few minutes in the hole would have killed him. Widely publicized, his near death prompted the state to install in nearby homes "gas detectors with alarms that sounded like canaries."[40]

Centralia soon splintered into hot-zone and cold-zone groups, which, in turn, further splintered. About half of the cold-side residents, who had little or no experience of the fire, felt safe; in the hot zone, however, only 22 percent felt secure, and over a third felt "very threatened." When hot-zone people complained of stress, headaches, and trouble breathing, folks on the cold side dismissed them as whiners.[41]

In a community of one thousand, at least seven grassroots groups sprouted between 1981 and 1983 in response to the fire and in response to responses to the fire. A major fault line lay in whether to abandon town. People took sides, friendships fell apart, and neighbors avoided one another. Escalating tensions touched off "telephone threats, tire slashings, and a fire bombing."[42] At the edge of town, a sign welcomed visitors: "Centralia Mine Fire Is Our Future."

In July 1983, residents all over town felt menaced after the Office of Surface Mining released a study of the fire's extent. The office discovered that the fire was not one but four fires, which were moving north and south toward several communities and could eventually spread over nearly six square miles. The report urged evacuation as people's only option.[43]

Slow to act in the first twenty-one years, the government quickly relocated residents. Between 1983 and 1987, officials moved all but thirty families from town. In 1992, the state seized the property of the last holdouts, eighty-four folks in all. In 2013, eight people won a long court battle to stay in their homes.[44]

Effects of the fire made Centralia a "macabre tourist attraction." The *Toronto Star* reported that visiting the town made a "neat side trip for Canadians heading to Florida." As late as 2004, a self-appointed guide led gawkers on "regular tours of the fire zone." To deter the curious, the Pennsylvania Department of Environmental Protection warned that "walking and/or driving in the immediate area could result in serious injury or death." Despite warnings—or because of them—artists have covered with graffiti the closed main road and people still wander among the traces: a street grid, a few houses, a cemetery.[45]

Never extinguished, the fire simply moved on, through town and beyond.

Is Centralia our future?

■ ■ ■

Maybe. But governments have acted decisively to stop abandoned mine fires.

One reason the Centralia fire burned on was because government officials used half measures to put it out. At the time, the state had its eyes elsewhere. In Lackawanna County, the West Side mine fire in Carbondale threatened a population of more than sixteen thousand. In Scranton, whose population topped a hundred thousand, a fire burned just off Cedar Avenue, in South Side. In late 1966, the latter threat was too serious to ignore: according to one federal official, if the project to stop the fire had started two weeks later, a coal seam that extended under the city would have lit up, and the "town would have gone." Threatening thousands, both fires cost millions to put out.[46]

The Cedar Avenue fire smoldered only blocks from my grandparents' Pittston Avenue home, which they had just purchased after fleeing the fire in Carbondale. Ironically enough, their row home, built in 1872, originally housed workers employed at the nearby iron furnaces, the origin of the city.

Discovered in 1965, the Cedar Avenue fire started in mine and breaker refuse that filled a former stripping pit beneath a bowling alley. In June, gases from the fire seeped into the building, a situation that worsened until the place had to close in December. The burning waste first ignited the Clark bed, 130 feet below the surface. At some point, the fire spread to the next vein up, the New County. During efforts to dig it out, crews discovered the blaze gnawing at the Big vein, nearest to the surface.[47]

In September 1966, carbon monoxide found its way into nearby South Side homes. In November, the gas sent nine residents to hospitals. During the next week, several other homes were affected, and before Thanksgiving officials declared many houses "unfit for human habitation." The danger grew: by Christmas families in fifty more places had to hurry to safer ground. Now fearing that the fire would spread under much of Scranton, local, state, and federal officials called emergency meetings.[48]

Unlike at Centralia, the Cedar Avenue fire was soon extinguished, because three levels of government quickly cooperated to bring the blaze under control. With "millions of dollars of real estate" in peril, the secretary of the interior cut enough red tape to put six drills at work within three days to determine the extent of the fire and to "bleed off the gases." Crews took to airplanes with infrared sensing, others found the fire's edges with "geothermal borehole surveys," and still others tracked helium "through the old workings to check the underground air currents." To contain the fire, heavy equipment operators soon began digging a "4,500-foot, C-shaped trench, 190 feet deep and 400 feet wide."[49]

Killing a mine fire takes time. Although men were at work fighting the blaze in January 1967, excavation of the trench, which eliminated the threat of carbon monoxide, was not completed until October. After workers widened the ditch to reach the Clark vein, they laid down an "impenetrable barrier" to cut off gases from homes and to keep oxygen from feeding the fire. As machines ripped at the earth, crews sprayed water on the burning, used draglines to lift hot coal, and trucked the material to a site where it was leveled. Meanwhile, blasts from digging the trench and cave-ins caused by the fire destroyed houses nearby.

Adding to worries, steam drifted ominously over the town. Within a year, however, the excavation ended the carbon monoxide threat, allowing people to return home.[50]

Officials declared the fire out in August 1970. The effort consumed $5.3 million, making it, at the time, the "largest and most comprehensive project of this kind ever implemented in the United States." Unlike at Centralia, the project apparently came in under budget. The public paid for the work because, as one official complained, now-defunct coal "companies had spent almost nothing to repair the damage caused by mining."[51]

In 1966, coal under Cedar Avenue was not the only land burning in South Side. Between the Cedar Avenue fire and downtown Scranton stood the Baker bank, a "culm pile that had been ablaze for over thirty years." To fight this fire, crews at first dynamited the heap, intending to inject water into the resulting cracks. When this failed, they turned to draglines, spray guns, and bulldozers.[52]

In 1963, the Baker fire was one of 495 bank fires burning across the nation, and one of hundreds that smoldered "on the edge or within the city limits of communities of 10,000 to 100,000 persons." Among the 863 culm banks in the Anthracite Region, twenty-seven burned, spewing "billions of cubic feet a day of steam, carbon monoxide, sulphur dioxide, hydrogen sulphide and ammonia." In coalfields across the country, an estimated "18.5 billion tons of tailings" spread across almost two million acres, "nearly the area of Delaware and Rhode Island combined."[53]

Like abandoned mine fires, burning culm banks sometimes killed people. For example, in 1900 fumes overcame a forty-five-year-old as he walked across a Scranton culm pile. In 1905, a homeless person warming himself on a burning pile in Hudson died of asphyxiation. In 1918, fumes from a culm bank in Old Forge killed a man; the next year, a forty-one-year-old died of suffocation on a burning bank in Olyphant.[54]

Plaguing Marywood with a rotten-egg smell, two Scranton culm fires achieved celebrity status in 1968. In July, the state department of mines put Operation Scarlift into action to fight the fires with "all the publicity of a motion picture premiere." A star of *The Molly Maguires*, which was being filmed in nearby Eckley, Samantha Eggar arrived in town to launch the air-pollution control project. In the "true spirit of a motion picture star out to raise the morale of the troops," Eggar operated for observing press crews a hydraulic cannon.[55] After her cameo, workers extinguished the fires in the usual way: spraying the banks with water, dumping burning material into ponds, piling it nearby, and leveling it into a large plateau. *The Molly Maguires* went on to be a box-office bust.

These days, officials do not hesitate to act quickly on reports of mine or bank fires. In early 2014, authorities scrambled to prevent a culm blaze north of Carbondale from becoming Lackawanna County's fourth active fire. Threatening coal seams, the Fell Township fire, billowing "clouds of sulphurous smoke," came to the attention of the state Department of Environmental Protection (DEP) in mid-December 2013. The Fell fire "spread about 120 feet deep—from the top of a hill of culm, where it likely began, to 40 feet beneath where the pile once leveled out to flat ground." Officials were not sure whether a coal seam ran under the culm; for some reason, the federal Office of Surface Mining Reclamation and Enforcement could find no mine maps of the area. The Fell fire may have been burning for "years and years" before its discovery. After a contractor spent four months working 24/7, DEP declared the fire out in May 2014; total cost: $2 million.[56]

Funds to fight fires like this one come from a tax on the modern coal industry. Suggesting that there may not be enough money to do the job, in 2005 only eleven of sixty-nine completed fire-control projects found financing; at the same time, the federal government counted in eleven states 141 underground mine fires. In 2014, at least eight burned in Lackawanna and Luzerne Counties. Unless the government renews it, the tax will end in 2021. If the tax disappears, who will fight legacy mine fires?[57]

■ ■ ■

Mine fires have threatened Marywood, too. In 1932, a hole forty feet deep "broke open beyond the cemetery on the college campus, revealing a mine fire" whose vapors drifted into the surrounding neighborhood.[58] The fumes grew so bad that people could not sleep; many felt their lives "menaced." Although residents had known about the fire for some time, nobody reported it. A mining engineer found it hard to believe that no one had sounded the alarm; surely, they knew that the "whole property in that section of the city was endangered by this fire, which could easily communicate itself to the mine workings, as the dump was made in an old cave hole." Comparing the scene to a culm bank fire, the engineer noted that the blaze had been burning a "long time," but only recently had the material covering it "cracked open in many places, which cracks act as vents to make the dump burn furiously." Pouring water on the fire, as the local fire department did, "only added fresh fuel to the flames as the water was not enough to drown out the fire, but it was sufficient to give plenty of oxygen and create explosive gases."[59] The fire had to be dug out. A contractor agreed to do the work but refused to start until someone accepted fault for the blaze. No one would.

Marywood, neighbors, and the borough had dumped ashes and garbage into the cave hole, which had formed when the Pennsylvania Coal Company removed anthracite from the surface vein. All contributed to the mess, and all refused to take responsibility. The borough, claiming that it had dumped garbage into the hole merely to fill it up, blamed Marywood for hauling hot ashes to the site. The borough was, however, happy to supply a hose to help fight the fire.[60]

For Marywood, killing the inferno was a high priority because the blaze threatened the very existence of the college. The "nauseating gas emanating from the fire" had the community in an "uproar," and school officials feared that news of the blaze would lead parents to pull their children from campus. In the end, Marywood split the cost with Pittston Coal, a subcontractor of Pennsylvania Coal. Had the college acted on the fire six weeks prior to the start of classes, school leaders could have avoided trouble.[61]

A second mine fire near campus burned between Marywood and the Marvine bank fires. In 1960, workers building Interstate 81 discovered "excessive heat and fumes in bore holes and rock faces near the highway excavation." The find led to "public consternation that the mine fire might extend under the residential sections of Greenridge and Marywood College."[62]

Blind flushing killed this fire. In controlled flushing, an underground worker sprays water and waste material into workings. In blind flushing, no worker directs the material, which is simply pumped underground to create a barrier that, with any luck, contains the blaze long enough that the fire consumes itself. After crews spent five months drilling boreholes to determine the extent of the fire, others drilled "hundreds of holes" at the site and pumped sand underground to smother the blaze. As far as anyone can tell, the fire is out.[63]

■ ■ ■

Around the world, land burns. In Jharia, India, for example, mine fires endanger more than a million people. In Indonesia, scores of underground fires have been ablaze since 1997, when a drought made rain forests into tinderboxes. Hundreds of coal fires in China contribute "2–3% of annual world emissions of CO2." No place, it seems, is safe.[64]

At the heart of the earth burns a molten core that every so often reminds us that we ride on fire. In April 1815, with ten times the power of Krakatoa, Mount Tambora, in Indonesia, erupted, shooting debris forty kilometers high. Killing more than one hundred thousand people—ten thousand instantly—the blast generated record magma flows and ash fallout. Affecting climate worldwide, the dust altered weather patterns for years, causing social and economic unrest in far-flung regions. In 1816, memorialized as the year without a summer, cold weather lingered in the Far East, Europe, and North America, destroying crops and causing famines in Bali and China. At the same time, weeks of rain in Ireland killed the potato crop; food shortages followed.[65]

In June 1816, Percy and Mary Shelley left a rain-soaked England for Geneva, where they met Lord Byron. While the Shelleys wandered the beach and boated on the lake, Byron worked away at *Childe Harold* and wrote shorter poems, among them "Prometheus." When rain fell, the three retreated indoors, spending hours reading ghost stories and debating whether electricity could reanimate a corpse.[66]

Responding to Byron's challenge to tell a ghost story, Mary Shelley wrote *Frankenstein: A Modern Prometheus*, a parable about the consequences of lighting fires. Scientist Victor Frankenstein cobbles together a body, steals fire from the heavens, and creates a life that threatens humanity. The longer Frankenstein refuses responsibility for his creation—and the longer he keeps it a secret—the more dangerous it is. In tracking down the Creature, the scientist becomes a creature of his creation, following the monster from Europe to Central Asia to the Arctic. Ending in uncertainty—with Frankenstein dead and the Creature on the loose—the novel leaves open whether the fire that Frankenstein lit extinguishes itself or lives on, ready to strike again.

Frankenstein wants to outdo Prometheus, reasoning that if he could find the "principle of life," he could raise the dead.[67] Jumpstarted in his pursuit by a "stream of fire" (22)—a lightning bolt—he discovers at university a chemistry professor who celebrates modern scientists as gods, men who have "acquired new and almost unlimited powers; they can command the thunders of heaven" (27). Inspired, the student exults that he will "pioneer a new way, explore unknown powers, and unfold to the world the deeper mysteries of creation" (28). To steal from the gods the power of life and death, Frankenstein works obsessively, ignoring the "charms of nature," shunning classmates, and neglecting his family (33). With the rest of the world dead to him, he uses electricity to spark life in an assemblage of body parts (35).

Although successful in using fire, Frankenstein undoes his triumph by abandoning responsibility for his actions. When his creature opens its eyes, the scientist flees in fright (35). Not until two years later, in a "flash of lightning" (50), does he even glimpse it again. But Frankenstein cannot ignore responsibility forever. When he finally comes face to face with his creation, the Creature—seeking connection, human companionship—laments, "Am I not alone, miserably alone?" (69). Acknowledging "for the first time . . . the duties of a creator"

(70), Frankenstein listens—in the light of a fire—to the Creature tell a heart-rending story of wandering from his birthplace, spurned by everyone he meets.

Through telling stories, we experience in safety what we forge in our minds and furnaces. Just as we learn about him through his story, the Creature learns about himself from poetry, history, and fiction, which present to him different views of human life. *Paradise Lost*, a volume of Plutarch's *Lives*, and *Sorrows of Werter* offer him virtual connections to others, revealing to him an "infinity of new images and feelings" that sweep him through a range of emotion, from ecstasy to dejection (91). He realizes that, though he may be alone, his feelings are not only his. Whereas Plutarch's *Lives* prompts within him "ardour for virtue . . . and abhorrence for vice," Milton's epic leads him to "different and far deeper emotions" (92), and the novel causes him to weep in identification with the title character (91). Reading opens to him his inner world and prods him to ask basic questions that Frankenstein ignored: "Who was I? What was I? Whence did I come? What was my destination?" (91).

What we form in fire manifests who we are. Frankenstein's double, the Creature has a complexity that makes him more human than his creator, whose single-minded self-absorption causes the deaths of his friend, his bride, and his brother. A secret provider for the DeLaceys (90) and the saver of a child's life (101), the Creature also strangles three people (102, 129, 144) and frames a woman for his murder of a second child (103). Only after the DeLacey family violently rejects him does the Creature declare "ever-lasting war" on humanity, especially against his maker (97). Unlike the scientist, the Creature sounds sane in his storytelling, but he also plots a long revenge in leading Frankenstein deep into the Arctic.

Unless we acknowledge our creations, they will haunt us. The Creature wants Frankenstein to pursue him, to accept him as his son, and to suffer as he suffers (150). Frankenstein wants only to kill him. To keep his maker hunting, the Creature frequently leaves "some mark to guide" him (151). Goading his creator, he also makes "marks in writing on the barks of trees, or cut in stone," with one inscription glorying, "My reign is not yet over . . . you live, and my power is complete" (152). Doggedly, Frankenstein follows, always just behind, until finally, unable to go on, he consents to come aboard a ship that seeks the Northwest Passage.

Unlike Frankenstein, Walton, the ship captain, assumes responsibility for the story he shapes. As Walton nurses the scientist back to a semblance of health, Frankenstein tells his tale, which the captain shares with us as a series of letters to his sister. With the ship readying for home, however, its mission a failure, Frankenstein sickens and dies. The Creature soon steals into the cabin to mourn over his creator's body. Discovering him, Walton, who knows their history, does not run from or spurn him, but asks him to stay. The connection keeps the Creature in conversation.

Admitting fault for Frankenstein's death, for driving him to collapse, the Creature cries that his own life has now "wound to its close" (163). Approaching him with "curiosity and compassion," Walton admonishes the Creature—and, by extension, Frankenstein—that if he had "listened to the voice of conscience" before enacting his "diabolical vengeance" the scientist would still be alive (163). Despair and envy, the Creature responds, drove him to "cast off all feeling," to kill Frankenstein's bride, and to embrace the evil he had chosen (164). Departing, the Creature takes responsibility for his crimes, telling Walton that he will throw himself on a funeral pyre (166), an act that readers do not witness.

Reducing life to a technical problem, the "self-devoted" Frankenstein worked away unaware that living requires empathy, community, and connection (163). The idealist-scientist sought knowledge solely for the sake of accomplishing what others had not. Lost in dreams of the final product, he lit a fire without thinking about how it might affect the world. Others suffered for his carelessness. Even with his last breath, however, he could express only his will to know, uttering, "I have myself been blasted in these hopes, yet another may succeed" (162).

■ ■ ■

The fire of knowing can light up the world, set it on fire, and do both at once. Controversies about climate change, for example, come down to questions about how we wield fire. What are the effects of how we use it? Who is helped and who is hurt? Do we need to reassess what we do and why we do it? How can we put our Promethean impulses to work to keep ourselves cool enough to keep our home fires burning?

Literature offers a place to ask these questions, to imagine answers, and to think about consequences. Lighting our way by collecting human knowing, it reminds us of our responsibility for what we learn. Science and history are ways of knowing, too, just as philosophy and mathematics are, but literature reanimates lived experience, embraces ambiguity, and celebrates figurative language, none of which unfolds on firm ground. Keeping memory alive, literature calls attention to what we would rather forget and suggests that what we see is not always all that is there, wherever we are. Reading literature—an unstable thing—in an unstable world leads one to wonder, which inevitably sparks new ways of knowing—and being.

FOUR

In the Gaps

■ ■ ■

The gaps I mean . . .

ROBERT FROST, "Mending Wall"

I grew up on a small dairy farm not far from Scranton. When I was seven, maybe eight, I stood under a dead elm behind the barn to watch the herd file by. Suddenly, the lead Holstein and a first-calf heifer butted heads, battling, the cow shoving her crown under the other's neck and ramming her side. The heifer backed off, defeated, but a half dozen others crowded in and hammered on her until she went down, heaving, bleeding from the nose, her eyes rolling white. I ran to the house, burst into the kitchen, and shouted what happened. Unconvinced, my father refused to look, but she was there for him to see, dead, killed for refusing her place.

The moment stuck with me. Inarticulate, I couldn't cross the gap between his view and my experience. What I had witnessed—cows killing a cow—had never happened in our history; it was my first brush with violence, betrayal, and death. Expressing the unthinkable required a language that I didn't possess, a pattern that I didn't know was possible until long after I discovered books. Although early on I understood reading as connection, I didn't know to what depths the connections could reach. At first, reading didn't bring me much beyond the surface of how others made sense. One breakthrough after another opened, though, in high school and college, when my English, history, and philosophy teachers multiplied the perspectives through which I perceived a living world. Soon, some of my half-formed ideas fell into place.

■ ■ ■

A repressive political system limits people to a few guides, and often to only one, itself. For example, in 2013 the Chinese government banned university students from discussing seven topics, including freedom of the press, universal values, and aspects of history.[1] All seven relate directly to the liberal arts, which, apparently, Chinese officials fear, likely because the liberal arts encourage people to explore critically multiple points of view. For Communist Party leaders, holding on to power means stifling debate, which means imprisoning people in a cave of ignorance.

Meanwhile, in the United States, people disparage the liberal arts as useless. A 2013 column published in the *Scranton Times-Tribune* argued that colleges do a poor job of delivering basic education, especially given their high tuition costs; too few require, the writer noted, introductory courses in literature, history, foreign languages, or economics.[2] Two weeks later, a local resident challenged the columnist in a stinging letter to the editor that defined higher education as higher training, arguing that colleges

> should be teaching courses in the student's major designed to get each student a good job. Quoting Shakespeare is not going to be helpful in a job interview at an accounting or engineering firm. I do not want to pay for fluff courses like the ones Mr. Burnett mentioned that are not designed to advance a student's knowledge of his or her chosen profession . . . A college education is about getting a good job. Period. If a college student with a sheepskin in hand thinks "of the people, by the people" is from the Declaration of Independence and not the Gettysburg Address, so what?[3]

This perspective is not unique; many people, including those elected to know our key civic documents, share this view. And act on it.

■ ■ ■

Frederick Douglass lived as a house slave in Baltimore in the 1820s and '30s. No one formally taught him how to read or write. Most whites in town would have thought that teaching black children their ABCs was unnecessary at best; at worst, a crime. After noticing how vehemently his master denied him access to reading and writing skills, Douglass determined to discover the power behind ink and paper. He haunted neighborhood alleys, challenging white boys to reading contests. In 1838, he made his way to freedom.[4]

In the founding year of the IHM order, 1845, Douglass published his autobiography, *Narrative of the Life of Frederick Douglass, an American Slave*, an expression of his belief in the power of reading and writing. A matter of life and death, literacy liberated him, literally and figuratively, but sharing his work put him in danger of being snatched back to slavery. A witness, Douglass names names, crimes, and locations to document the system's horrors, evidence that slavery apologists refused to see. Refuting the story of paternalism that slaveholders peddled, Douglass demands that slaves get the rights due them as human beings and as Americans. He touched a nerve. Fearing for his life, he fled to England, returning to the United States only after a British benefactor bought his freedom with cash.[5]

Literacy leads Douglass to think for himself. In *The Columbian Orator,* he finds a master and a slave debating the slave's right to freedom; confronted with powerful arguments, the master lets him go (23–24). Discovering that writing changes minds—and lives—the twelve-year-old Douglass realizes that he possesses the power "to utter [his] own thoughts, and to meet the arguments brought forward to sustain slavery." He also finds speeches about Catholic emancipation that "gave tongue to interesting thoughts of [his] own soul, which had frequently flashed through [his] mind, and died away for want of utterance" (24). That others thought as he did, that he was not alone in what he knew and felt, offers him solid grounds from which to answer his oppressors.

Close attention to the *Narrative* opens worlds of meaning. The autobiography begins, for example, with the pronoun that slaveholders had denied Douglass, I, an assertion of individual human identity: "I was born in Tuckahoe . . ." (1). He ends his story by signing his name, "Frederick Douglass" (76). Born into slavery Frederick Bailey, he is reborn as a free man when he chooses a new surname (66). The identity that he claims combines his pre- and postslavery lives. Between "I" and "Frederick Douglass" stretches his life story, which he authenticates by opening his book with a location: the reader who disbelieves him can go to "Tuckahoe, near Hillsborough, and about twelve miles from Easton, in Talbot County, Maryland," and ask whether the cruelties he catalogs really happened (1).

The commas in the first sentence create a measured rhythm that underscores the *Narrative*'s dominant tone, reasonableness, which is unremarkable until I encounter his descriptions of whippings, beatings, and killings. That someone who witnessed these brutalities could sound so matter-of-fact reveals not only his level of emotional control but also his control as a writer. By keeping his own feelings in the background, he draws out mine: I recoil in shock and horror when I discover a fifteen-year-old bludgeoned to death and when I witness an overseer shoot a slave in the face (14, 15). Because the revulsion is mine, I cannot pin it back on him; my visceral involvement makes me more willing to accept his testimony: this inhumanity is happening, now, and it has to stop.

To help me to know this inhumanity, Douglass puts me in his place; a ship caulker, he understood that a well-shaped sentence can bridge gaps between writer and reader. For example, I find him as a child watching the brutal whipping of his Aunt Hester. In the eyes of Captain Anthony, the slave master, Hester is sexual property, an object for his gratification, and he doesn't want her with Ned, a slave who lives a plantation away. After he catches her with Ned, Anthony drags her to a kitchen, ties her hands, forces her onto a stool, and hooks her hands to a ceiling joist. A careful reader reacts with pain at what this sentence relays: "Her arms were stretched up at their full length, so that she stood upon the ends of her toes." Stretching and reaching for the stool tightens her skin, making the whip cut deeper, each slice opening her back, more and more, until Anthony, exhausted, stops (4).

Literacy reoriented Douglass. Escaping north and writing his story freed him from a legal slavery; these acts also freed him from silently accepting how others defined him. He moved from the object of a master's command to the subject of his own sentence. Through newspapers and books he could now participate in a wider world, one far beyond his immediate past experience, which had required focus only on the moment, the task at hand, the spot where he worked. Unfortunately, he later discovered that solid reasoning and good writing do not always right wrongs; when argument fails, violence erupts. In the United States, it took civil war to stop people from legally owning people.

In the twenty-first century, reading and writing still need defense. Thirty million adults in the United States read and write "below basic" levels, which means that they have "no more than the most *simple* and *concrete* literacy skills." They cannot read a newspaper, let alone books. Built on the free exchange of ideas, the United States should not accept that 14 percent of its people can barely read and write. And with only 57 percent of Americans in 2003 able to read beyond a basic level, at least 43 percent of us don't have full access to complex arguments or have the contexts we need to defend ideas we value. Although a majority of Americans can read, too few understand "a language precise and articulate and lively enough to tell the truth about the world as we know it." Not only does reading literature help people to acquire and practice this "precise and articulate and lively" language, but it also teaches us that "we are dependent, for understanding, and for consolation and hope, upon what we learn of ourselves from songs and stories."[6]

* * *

IHMs required women to read widely in literature, history, and philosophy, no matter the degree they sought. Wrestling with great minds, the sisters asserted, made moral human beings. They wanted young women to confront questions that have nettled humanity for all of recorded time, and before. What does it mean to be human? What does it mean to live a good life? What is the relationship between the individual and others? Is the world a pattern? How does one make sense? Should people spend their talents for personal gain or to help others? Addressing these questions may be the only conversation humanity has in common, one that IHMs believed should be within earshot of everyone. To read is to hear the discussion; to write is to further it. Frederick Douglass, for one, first heard the conversation in *The Columbian Orator*; in the *Narrative,* I hear his first contribution.

IHMs talked in these terms, but coal miners struggled with depth, pitch, and cost. While women in Marywood classrooms read Aquinas, Shakespeare, and Parkman, below ground their male neighbors blasted faces, sparked fires, and broke surfaces. The work of coal miners heated buildings, paid bills, and created employment; the work of Marywood graduates promoted good food, fair wages, and wider literacy. Although the college has so far outlasted active coal mining beneath its grounds, the 2013 State of the Union address suggested to some on campus that those who think mainly about depths, pitches, and costs will soon sweep aside liberal learning in postsecondary education.

In February 2013, Peter Kilcullen, assistant vice president for marketing and communication, asked the Marywood faculty whether a college education was worth the price. No surprise, the vast majority said yes, an answer the American public doesn't share. In a 2012 *Time* magazine survey, 80 percent of Americans said that a college degree wasn't worth the money. In contrast to college leaders, the survey revealed, the public doesn't accept that one purpose of higher education is to "learn to think critically," a significant finding for liberal arts education, which often stakes its existence on this very idea.[7]

The cost of college is a national issue, and concerns about it threaten to remake education. In his 2013 address to Congress, President Obama defined students as consumers, colleges as job-training centers, and "more education" as equivalent to a "good job," as the "way into the middle class." Advocating further public disinvestment in colleges and universities, he declared that "taxpayers can't keep on subsidizing higher and higher and higher costs for higher education." After warning colleges to "do their part to keep costs down," Obama drew applause when he asserted that the government would “make sure that they do.”[8]

The president drew more applause when he asked Congress to change the Higher Education Act to take into account “affordability and value . . . in determining which colleges receive certain types of federal aid.” To help people to choose the most affordable college, he announced a government scorecard that would “compare schools based on a simple criteria [*sic*]—where you can get the most bang for your educational buck.” The scorecard, for Peter Kilcullen, means that “Washington is saying that college *is* a commodity, like a car; it’s not an investment.” In what amounts to an affront to Marywood, Obama “wants to reframe higher education to accommodate the American consumer by emphasizing not *academic* higher education but *practical* higher education.” Directly challenging the president’s definition of education, Kilcullen declared, “At Marywood, experience is not for sale; experience in our brand of higher education is something you learn in a context.” He meant, of course, that, “**like most private universities**, Marywood educates students in the context of a code of values—a mission—that cannot be measured in dollars and cents.” True, I know, but the institution has other, often competing, contexts: environmental, historical, economic, cultural . . .

With the defender of the free world recasting college as almost exclusively job training, Marywood must choose how to respond. Kilcullen offered his answer when he asked his colleagues what it meant for the institution to be a comprehensive university: “**It means we are Liberal Arts *and*** we are Pre-Professional and Professional.” The triply emphasized conjunction may suggest that these two aspects of the university exist in equal proportions, but numbers betray the imbalance: the university counts six undergraduate liberal arts degree programs, sixty-six undergraduate preprofessional and professional degree programs, thirty-four master’s degree programs, and two doctoral degree programs. The six liberal arts programs assume responsibility for about a third of the minimum number of credits required for an undergraduate to earn a degree, 126. As Kilcullen pointed out, “From a window-shopping standpoint, we certainly look like we’re preparing our students for careers,” but he made a crucial distinction when he stressed that “we’re *preparing* them, which is different from *training* them.” Pushing his answer further, he proclaimed, “We are not a Job Factory. We are not a Vocational School. We are not an online for-profit college. We don’t sell diplomas like commodities. We offer a blueprint for a lifetime.”

Metaphors matter. A blueprint? A map of an already-imagined life? No. Liberal arts disciplines point the way; at best, they prepare people to deal with uncertainty, to wrestle with the unknown. Not a blueprint; if anything, a sketch, a rough guide to the journey ahead.

■ ■ ■

A twilit journey, literature raises more questions than answers, which can frighten people who prefer prepackaged principles. But questions are critical: If you ask the wrong questions, what use are answers? To ask good questions means to think through how others have answered similar questions, a hazy process that can sometimes take a lifetime—and maybe generations—of revision.

To work through the haze, it may be worth remembering *Heart of Darkness*, a rough guide to questions about reading, interpretation, and meaning. In the novel, an unnamed narrator tells a tale that his friend Marlow told him and three others. As day fades to night, Marlow, aboard a yacht on the Thames, recounts his travels in Africa as captain of a freshwater steamship that extracts a trader from a company outpost, the Inner Station. As "inconclusive" an experience as it is a story, Marlow's journey moves not only up and down a river but also into the human soul, revealing what no one admits: our common capacity for evil.[9]

Kurtz, the trader that Marlow retrieves, may have supplied the company with as much ivory as all its other agents combined, but, "alone in the wilderness, [his soul] had looked within itself, and . . . it had gone mad" (19, 66). Outside of Europe, Kurtz felt no check, no limit, to his behavior, which soon included theft, murder, and self-absorption (66); not only did he believe that "everything belonged to him" but he also passed himself off as a godlike figure who had no qualms killing people (48, 57). After escaping the steamer, the ill man, as if reduced to an animal, turns his back on home and crawls away on all fours toward the jungle (64).

In Europe, Kurtz was another man. Liberally educated—with interests in music (71), writing (50, 68), and painting (25)—he had come to Africa "equipped with moral ideas of some sort" (31). According to a fellow trader who wished him dead, Kurtz at first believed that "each station should be like a beacon on the road towards better things, a centre for trade of course but also for humanizing, improving, instructing" (32). Marlow, who finds himself attracted to this paternalism, stays loyal to Kurtz because the latter had judged; in uttering his last words, "The horror! The horror!" the trader passes judgment on human life—suffering and death—and, perhaps, on his own life (69). Before settling in at the Inner Station, Kurtz at least had a moral code, Marlow notes, unlike his colleagues, whose only thought was "to tear treasure out of the bowels of the land . . . with no more moral purpose at the back of it than there is in burglars breaking into a safe" (30).

As much as they may attempt truth, words can paper over horrors. Marlow's aunt believes that Europeans in Africa, such as Kurtz, are "weaning those ignorant millions from their horrid ways," a faith she has absorbed from, as Marlow puts it, the "rot let loose in print and talk just about that time" (12). Kurtz himself likely fed on the same accounts, to which he contributes a chapter when he writes a report for the International Society for the Suppression of Savage Customs (49). Impressed, Marlow "tingle[d] with enthusiasm" as he read its "unbounded power of eloquence—of words—of burning noble words" (50). But the words hide a key fact: Europeans are harrying, displacing, and slaughtering Africans. Back in Europe, Marlow perpetuates the blindness when he passes the report to a journalist, minus a late postscript in Kurtz's handwriting: "Exterminate all the brutes!" (50, 71).

Unlike Kurtz, Marlow understands revision as a matter of life and death. For example, when the sailor notices that "sticks, little sticks, were flying about" (44), it takes him a heartbeat or two to realize that the sticks are arrows. Moments later, he mistakes for a cane the spear that kills the ship's helmsman. After this shock, he recoils at yet another revision. As the steamer approaches Kurtz's compound, the captain focuses binoculars on the place and spies a ruined fence, an emblem of limits let go: "Near the house half a dozen slim posts remained in a row, roughly trimmed, and with their upper ends ornamented with round carved balls" (52). Thinking nothing of it, he brings the ship to shore, where Kurtz's Russian friend beckons. As the two chat, Marlow makes a closer inspection of the posts, this time throwing his "head back as if before a blow" when he discovers that the "round knobs were not ornamental but symbolic" (57). The display of human heads is beyond his experience: paying closer attention refocuses him to think the unthinkable.

Storytelling cannot completely convey such moments. As Marlow struggles with his inability to articulate the meaning of his journey, a friend aboard the yacht, himself unable to imagine what the sailor felt, interrupts and accuses him of absurdity (47). Angry, Marlow stops, lights a pipe, and points out that his listeners have no category for understanding what he's telling them; they are, after all, content, each with "two good addresses . . . a butcher round one corner, a policeman round another, excellent appetites, and temperature normal" (47). Never pushed to their limits, they have not had to confront the unimaginable, which, Marlow knows, lies just beneath the surface of their lives, homes, and businesses; as each attends to "mere incidents of the surface, the reality—the reality . . . fades. The inner truth is hidden, luckily, luckily" (34). Ironically, the enactment in Africa of what they cannot imagine in London makes their lives affordable, comfortable, and meaningful.

Marlow suspects the absurdity of trying to bridge gaps between people. As if seeking reassurance that gaps can be crossed, he pleads to his friends, "Do you see the story? Do you see anything?" (27). After admitting the impossibility of conveying his story's "life-sensation . . . its truth, its meaning," he goes silent but then, upon reflection, takes comfort that his friends could at least, as he says to them, "see more than I could then. You see me, whom you know" (27). Not really. In fact, his friends cannot see him, let alone the story he's telling; the night had grown too dark, "pitch dark" (27). Further undercutting that fully seeing—fully knowing—others is possible, Marlow, "sitting apart, had been no more to [them] than a voice," confirming the sailor's first thought that "we live, as we dream—alone" (27).[10] How, then, can we ever know others?

Kurtz was not alone, of course, at the Inner Station. Despite any humane principles he initially held, the trader is unable or unwilling to know Africans as people who have ideals, codes of behavior, and stories to tell. Instead, he dismisses them as "brutes" that deserve erasure (50). Marlow, too, only has a "suspicion of their not being inhuman," and the double negative betrays that he cannot get beyond his preconceptions of blacks as simpleminded savages: "What thrilled you was just the thought of their humanity—like yours—the thought of your remote kinship with this wild and passionate uproar" (36). At the heart of a novel that exposes to home the crimes of imperialism abroad lies this blindness, the darkness of racism, which at least one later writer attributed not to its characters only but also to its author, Joseph Conrad.[11]

■ ■ ■

My schooling seesawed between public and private. After graduating from Forest City Regional, a public high school, I commuted over the Moosic Mountains and down the Lackawanna Valley to Penn State–Worthington Scranton, in Dunmore, before transferring to the Jesuit-run University of Scranton. The PhD took me back to public education, at the University of Maryland. I now teach at Marywood, a Catholic institution.

I majored in a humanities field because I wanted to know how people saw the world. Interested in knowing more about how others lived and thought about living, I had to choose between English and history, subjects that seemed to me to get closer than other subjects to the dailiness of life. And I knew that

I needed people who had devoted themselves to these subjects to help me to interpret the books that I read. Their presence mattered.

As a master's student, I fell into teaching when a professor assigned me to teach grammar as a separate part of a developmental writing course. Afterward, I pursued a work life in teaching English because I wanted to help students to understand how people have confronted common problems, how they have imagined a life worth living, and how they have wrestled with questions of being and knowing.

Between farm chores and in the evenings, I would read *PMLA*, sometimes cover to cover, trying to get the lingo, trying to figure out the issues, so that I would better know what I was getting into when I returned to graduate school. It scared me a little that I didn't get it all. I reread paragraphs again and again, and I reread whole articles, often enough clueless. Every once in a while, though, I'd understand a piece, or so I thought, which I took as a triumph. I did no analysis, of course, so I expressed no reservations and had no responses. Later on, I found out that most people in the profession didn't read *PMLA*, because they found the articles so often so obscure and riddled with jargon that they were unreadable. Now I wonder whether it should scare me that I understood some of the stuff.

In 1990, I decided to pursue a PhD after receiving a letter from *Studies in Short Fiction*, a scholarly journal that had considered for publication an essay that I had submitted about Ambrose Bierce and his service as a mapmaker in the Union army. I found the letter, small and white, on the kitchen table after coming in from the barn for a cup of coffee. The journal's name and address were printed in the envelope's upper left corner; my name and address were typed neatly in the center. I knew then that this was a life-changing moment. With one finger, I slid the envelope to the center of the table and left the house to spread a load of manure, thinking that if the letter were an acceptance, I'd go back to school. If not, I wouldn't.

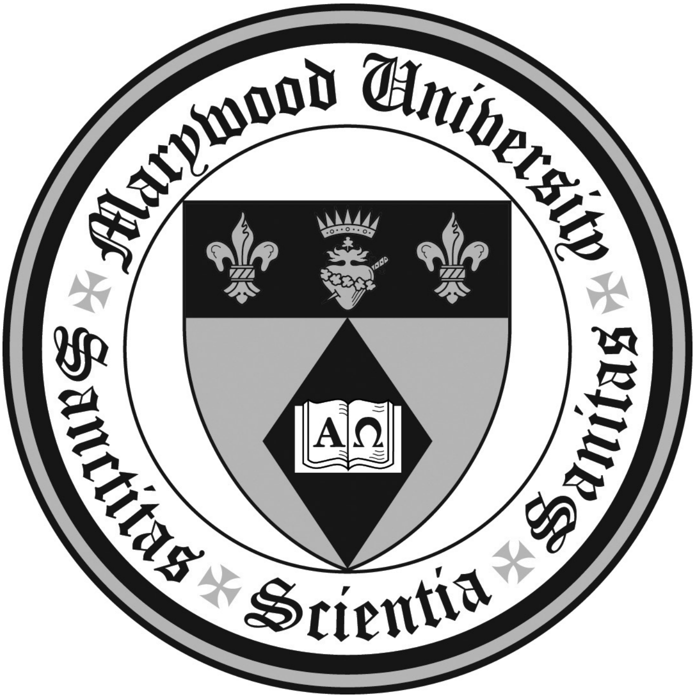
A few months after I defended my dissertation, Marywood advertised in the *Chronicle of Higher Education* an opening for an assistant professor of English. I couldn't believe my eyes. A job near the farm never crossed my mind as possible, but when it was presented to me, I had mixed feelings. Graduate school taught me—implicitly, never explicitly—that I should work at a major research institution, the ultimate brass ring. This, Marywood was not. Attending its crosstown rival had taught me—implicitly, never explicitly—that Marywood wasn't even the best school in the city. Working at home taught me—implicitly, never explicitly—that I should work all I could at the farm. If I lived in Scranton, I knew that I could help hay in summer, but I was afraid that I'd be expected to be on call, year-round, which I knew wouldn't work. I also knew that I'd go home a different person; the place would be different and my relationships with family and friends would be different. I interviewed for the position in July, left Maryland in late August, and started teaching at Marywood a few days after I arrived home.

On the farm, I used to walk uphill to the barn to feed calves and to milk cows, the Moosic Mountains marking the far horizon. These days, I walk uphill to Marywood to teach and to learn, climbing out of the valley where I can't see so far, to campus, where I confront mountain ranges east and west and the valley stretching north and south. From the farm, I saw one side of these mountains; from Scranton, I see the other.

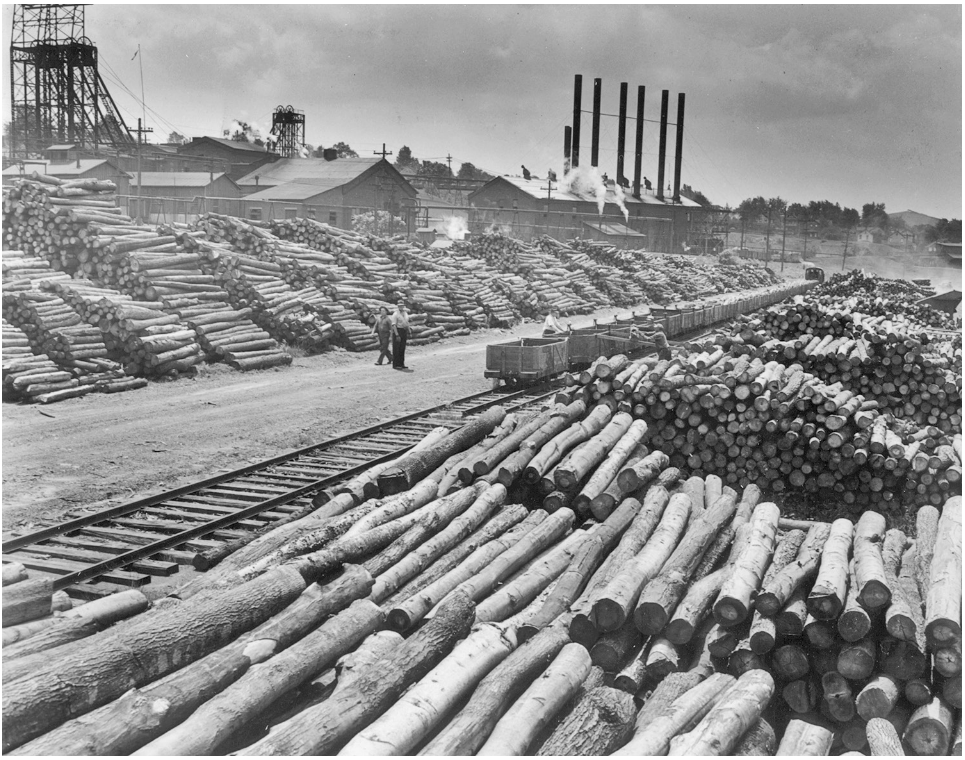
■ ■ ■

A few months after the 2013 State of the Union, a plant geneticist gave the commencement address at the University of Kansas. Using an extended analogy, Wes Jackson maintained that, just as nineteenth-century slavery was legal and immoral, so today is human depletion of the ecosphere: "Now nature is being legally and increasingly enslaved, legally locked in an increasingly abusive and wasteful servitude." Just as in the 1850s Kansans played major roles in battles about slavery, they should now play major roles in debates about the fate of the earth. For four years, Kansas graduates had trod ground central to Jackson's metaphor; when they celebrated a basketball victory on the built environment of Massachusetts Avenue, former prairie land, they had shouted and screamed where Confederate guerillas massacred Unionists and burned the town. A fellow Jayhawk, Jackson encouraged graduates to join the struggle to free nature, exhorting them in their future work to "merge the moral and the legal."[12]

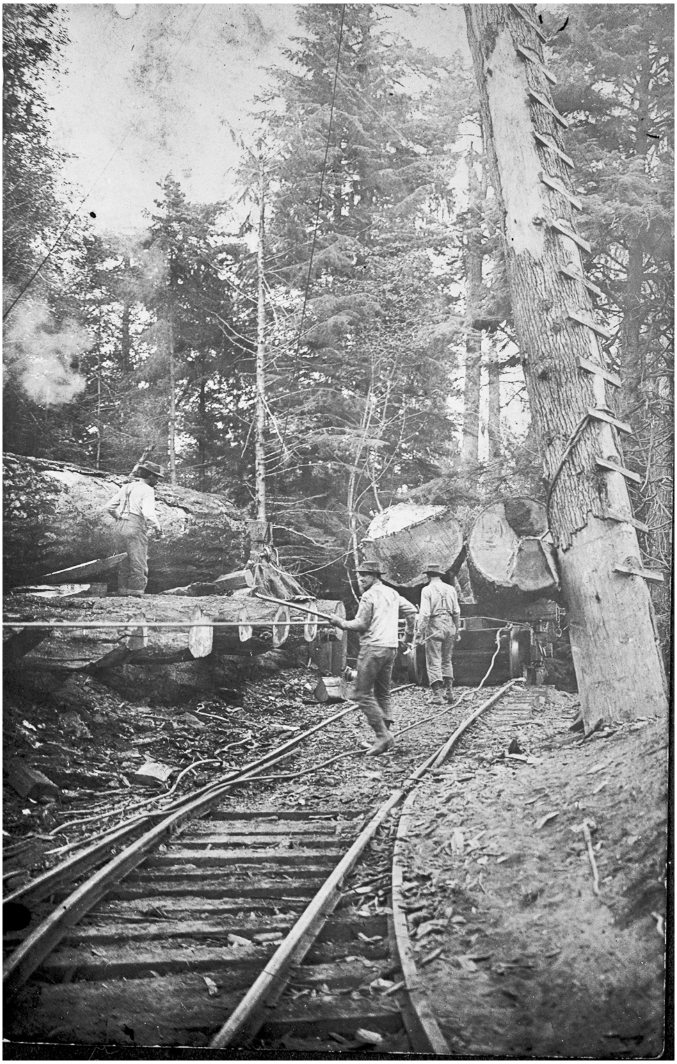
To free nature, Jackson prodded higher education to offer a "homecoming major," a curriculum that would help people to become "native to [their] places in a coherent community that is in turn embedded in the ecological realities of its surrounding landscape." An alternative to today's "one serious major"—"upward mobility"—the homecoming major would be "broader" than "sustainability or bioregionalism" because "it is largely cultural and ecological in scope." To protect "our emerging nativeness," he urged "universities to assume the awesome responsibility to both validate and educate those who want to be homecomers—not necessarily to go home but to go someplace and dig in and begin the long search and experiment to become native."[13]


Marywood University
Sanctitas
Scientia
Sanitas
AΩ

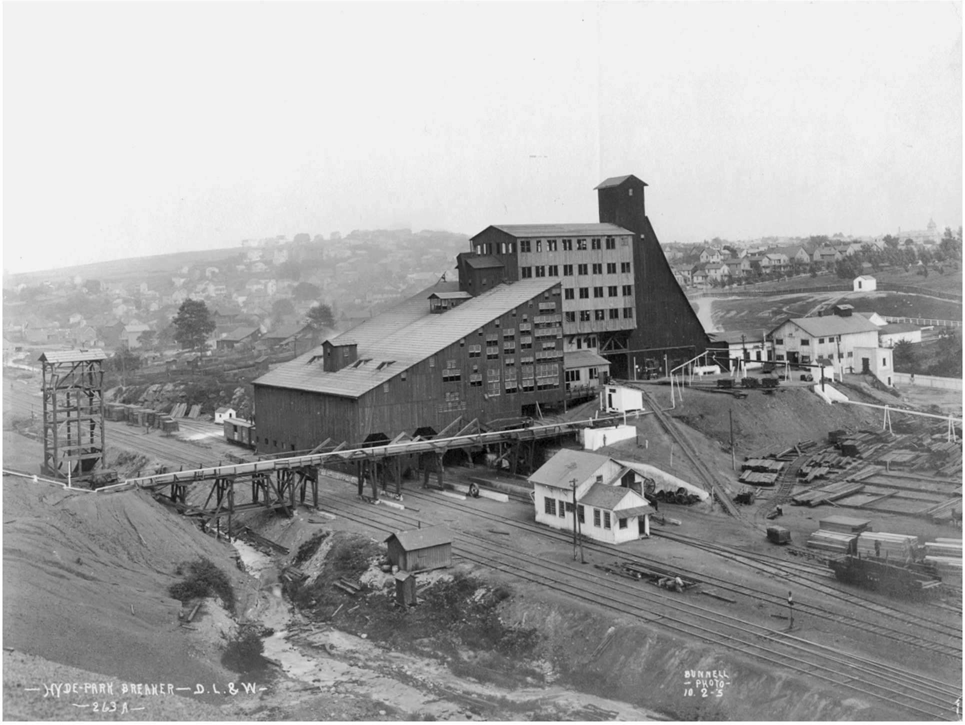
Marywood University seal, 1949. Courtesy of Marywood University



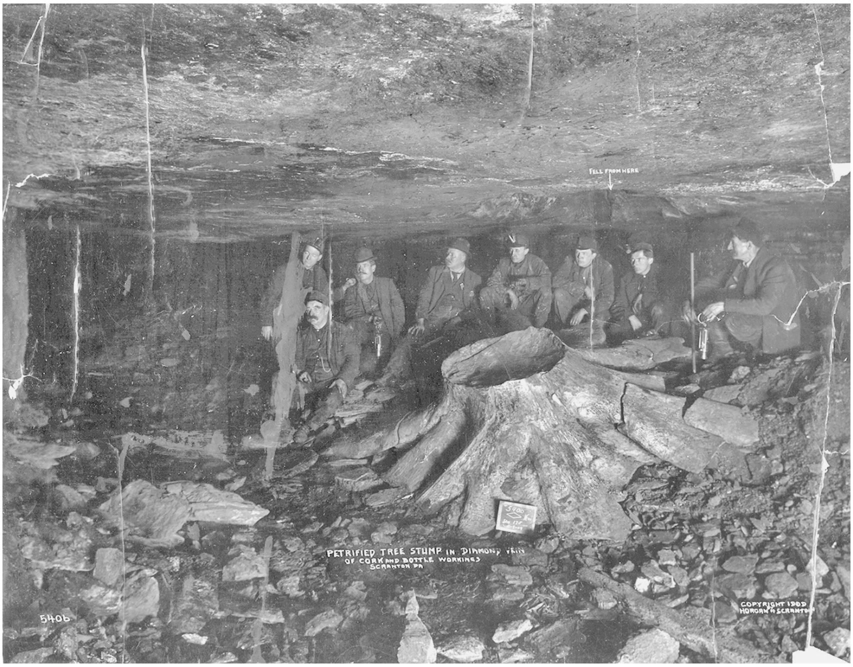
Grassy Island colliery timber yard, Olyphant, undated. Courtesy of Lackawanna Historical Society



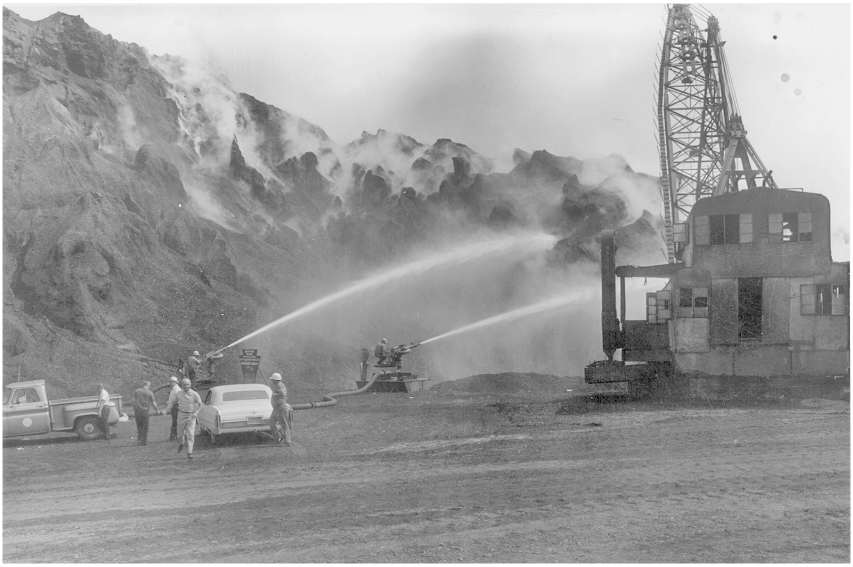
High line landing, Conlogue Brothers' Lampa Creek logging site, 1910. Photo by Jack Slattery, courtesy of Coos History Museum & Maritime Collections, 992-8-0528


— HYDE-PARK BREAKER — D. L. & W. —
— 263 A —
BUNNELL
— PHOTO —
10. 2-5

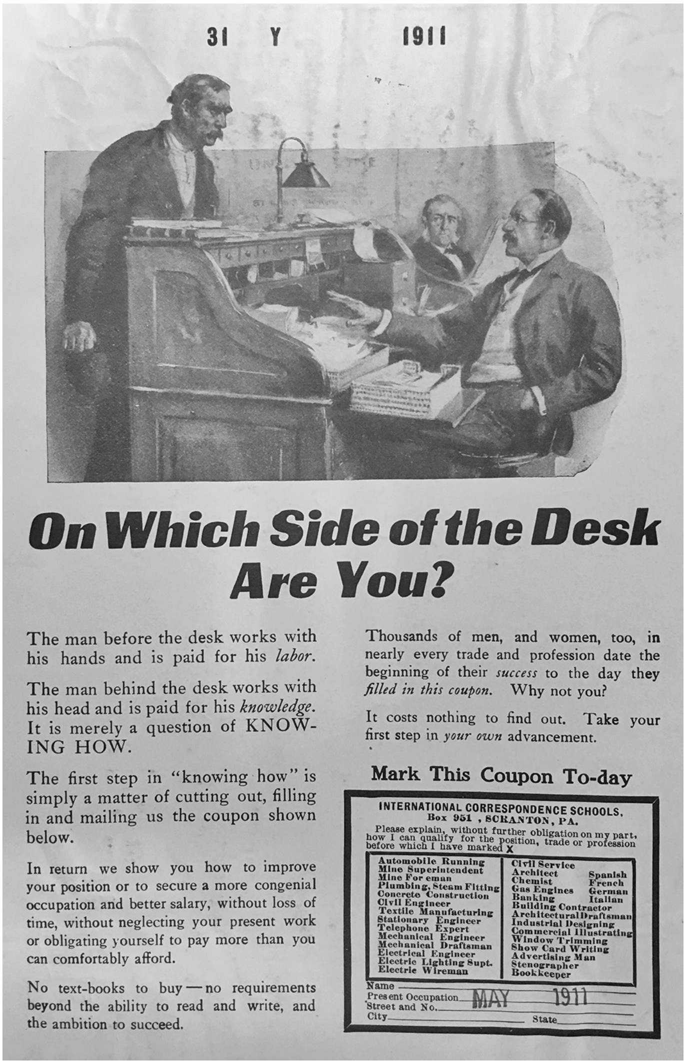
Hyde Park coal breaker, Scranton, undated. Courtesy of Lackawanna Historical Society


FELL FROM HERE
PETRIFIED TREE STUMP IN DIAMOND VEIN
OF CORK AND BOTTLE WORKINGS
SCRANTON PA
5406
COPYRIGHT 1909
BY
HORGAN SCRANTON

Petrified tree stump found in Diamond vein of Cork and Bottle Workings, Scranton, 1909. Courtesy of Lackawanna Historical Society



Extinguishing the Marvine culm bank fires, Scranton, 1968.
Courtesy of Lackawanna Historical Society



31 Y 1911

On Which Side of the Desk Are You?

The man before the desk works with his hands and is paid for his *labor*.

The man behind the desk works with his head and is paid for his *knowledge*. It is merely a question of KNOWING HOW.

The first step in "knowing how" is simply a matter of cutting out, filling in and mailing us the coupon shown below.

In return we show you how to improve your position or to secure a more congenial occupation and better salary, without loss of time, without neglecting your present work or obligating yourself to pay more than you can comfortably afford.

No text-books to buy—no requirements beyond the ability to read and write, and the ambition to succeed.

Thousands of men, and women, too, in nearly every trade and profession date the beginning of their *success* to the day they *filled in this coupon*. Why not you?

It costs nothing to find out. Take your first step in *your own* advancement.

Mark This Coupon To-day

INTERNATIONAL CORRESPONDENCE SCHOOLS,
Box 951 , SCRANTON, PA.

Please explain, without further obligation on my part, how I can qualify for the position, trade or profession before which I have marked X

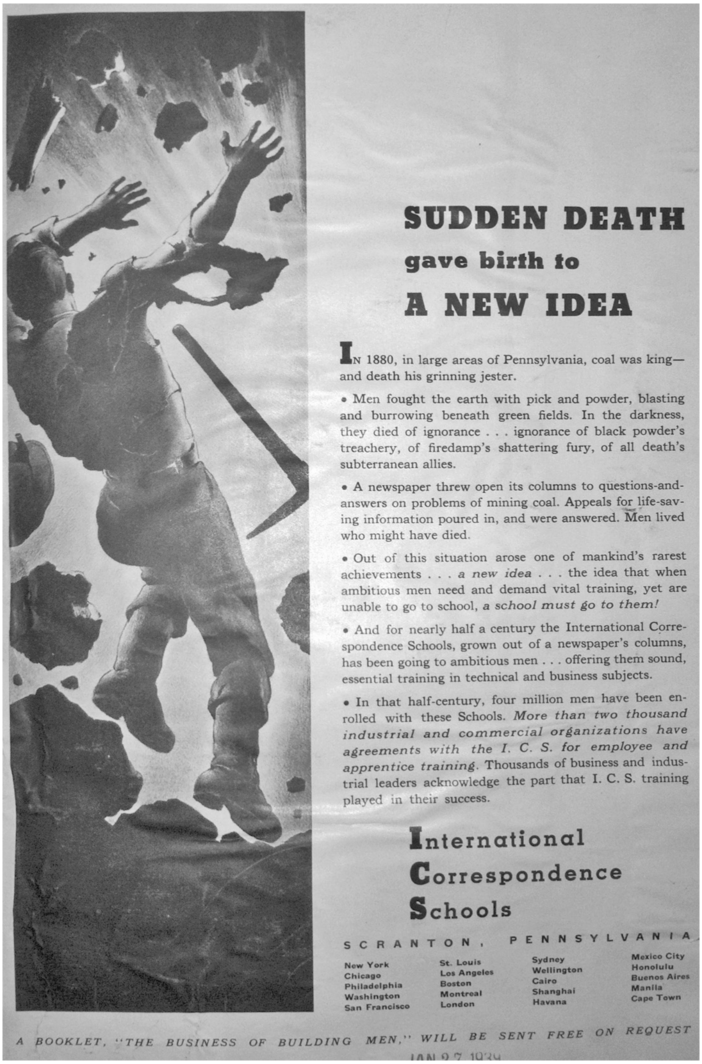
Automobile Running
Mine Superintendent
Mine Foreman
Plumbing, Steam Fitting
Concrete Construction
Civil Engineer
Textile Manufacturing
Stationary Engineer
Telephone Expert
Mechanical Engineer
Mechanical Draftsman
Electrical Engineer
Electric Lighting Supt.
Electric Wireman

Civil Service
Architect
Chemist
Gas Engines
Banking
Building Contractor
Architectural Draftsman
Industrial Designing
Commercial Illustrating
Window Trimming
Show Card Writing
Advertising Man
Stenographer
Bookkeeper

Spanish
French
German
Italian

Name __________
Present Occupation __________ MAY 1911
Street and No. __________
City __________ State __________

ICS advertisement, May 1911. Courtesy of International Correspondence Schools Collection, McHugh Special Collections, University of Scranton



SUDDEN DEATH gave birth to A NEW IDEA

IN 1880, in large areas of Pennsylvania, coal was king—and death his grinning jester.

- Men fought the earth with pick and powder, blasting and burrowing beneath green fields. In the darkness, they died of ignorance . . . ignorance of black powder's treachery, of firedamp's shattering fury, of all death's subterranean allies.
- A newspaper threw open its columns to questions-and-answers on problems of mining coal. Appeals for life-saving information poured in, and were answered. Men lived who might have died.
- Out of this situation arose one of mankind's rarest achievements . . . *a new idea* . . . the idea that when ambitious men need and demand vital training, yet are unable to go to school, *a school must go to them!*
- And for nearly half a century the International Correspondence Schools, grown out of a newspaper's columns, has been going to ambitious men . . . offering them sound, essential training in technical and business subjects.
- In that half-century, four million men have been enrolled with these Schools. *More than two thousand industrial and commercial organizations have agreements with the I. C. S. for employee and apprentice training.* Thousands of business and industrial leaders acknowledge the part that I. C. S. training played in their success.

International
Correspondence
Schools

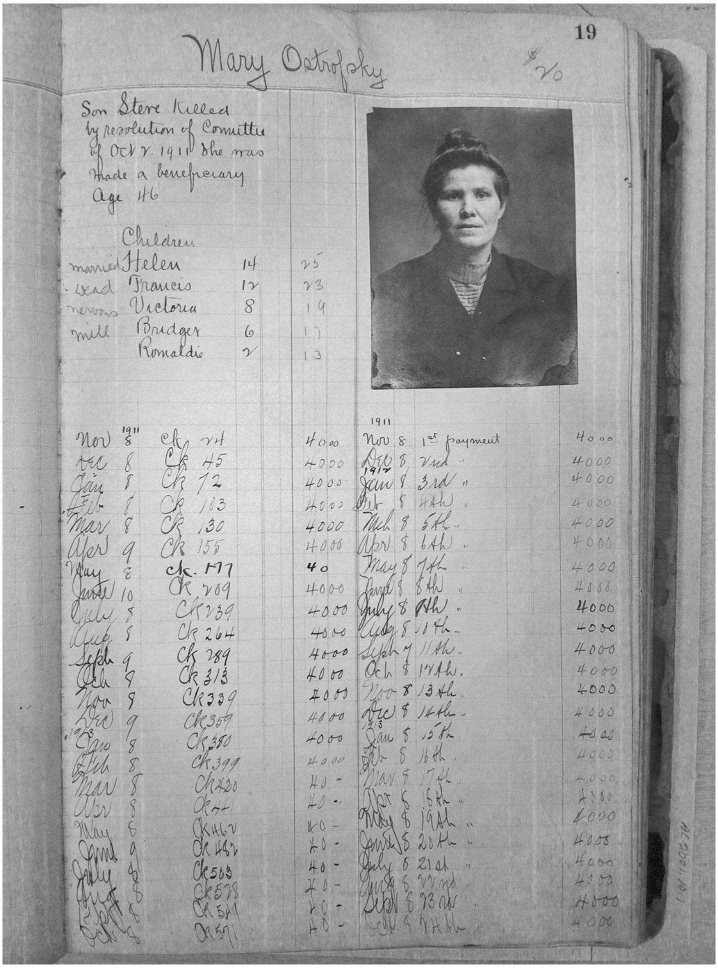
SCRANTON, PENNSYLVANIA

New York
Chicago
Philadelphia
Washington
San Francisco
St. Louis
Los Angeles
Boston
Montreal
London
Sydney
Wellington
Cairo
Shanghai
Havana
Mexico City
Honolulu
Buenos Aires
Manila
Cape Town

A BOOKLET, "THE BUSINESS OF BUILDING MEN," WILL BE SENT FREE ON REQUEST

JAN 27 1939

ICS advertisement, January 1939. Courtesy of International Correspondence Schools Collection, McHugh Special Collections, University of Scranton



19

Mary Ostrofsky

$20

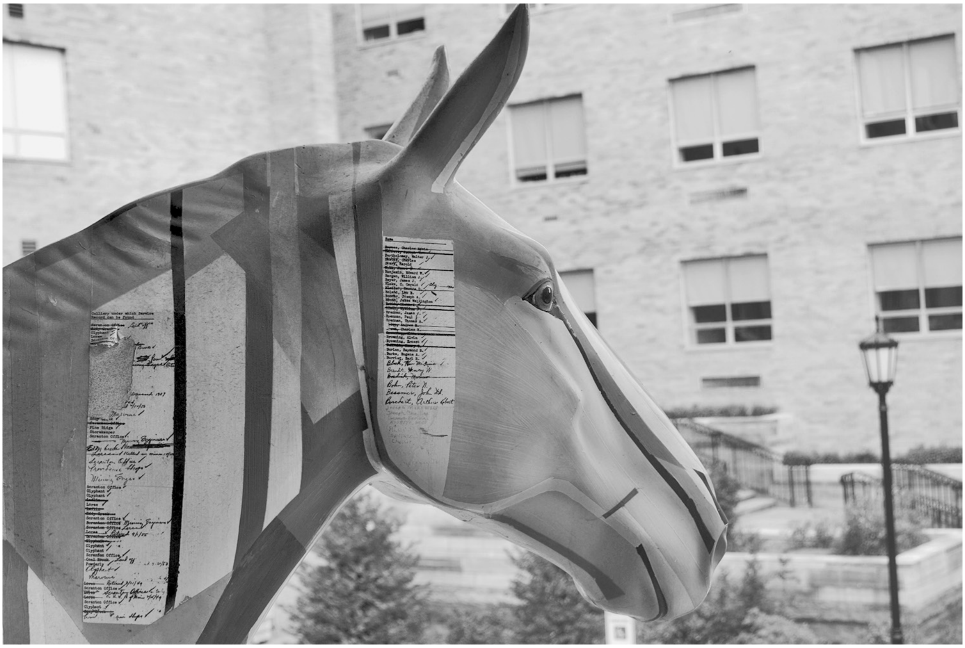
Son Steve killed
by resolution of Committee
of Oct 2. 1911 She was
made a beneficiary
Age 46

Children

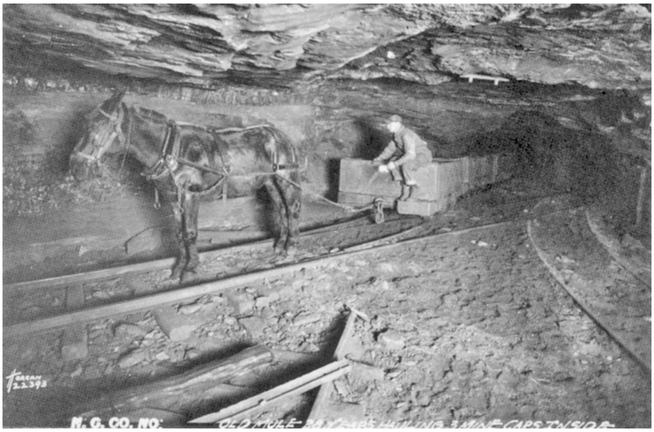
married	Helen	14	25
dead	Francis	12	23
nervous	Victoria	8	19
mill	Bridger	6	17
	Romaldie	2	13

	1911					1911		
Nov	8	Ck 24	4000	Nov	8	1st payment	4000
Dec	8	Ck 45	4000	Dec	8	2nd "	4000
Jan	8	Ck 72	4000	1912 Jan	8	3rd "	4000
Feb	8	Ck 103	4000	Feb	8	4th "	4000
Mar	8	Ck 130	4000	Mch	8	5th "	4000
Apr	9	Ck 155	4000	Apr	8	6th "	4000
May	8	ck. 177	40	May	8	7th "	4000
June	10	Ck 209	4000	June	8	8th "	4000
July	8	Ck 239	4000	July	8	9th "	4000
Aug	8	Ck 264	4000	Aug	8	10th "	4000
Sept	9	Ck 289	4000	Sept	7	11th "	4000
Oct	8	Ck 313	4000	Oct	8	12th.	4000
Nov	8	Ck 339	4000	Nov	8	13th "	4000
Dec	9	Ck 359	4000	Dec	8	14th "	4000
1913 Jan	8	Ck 380	4000	1913 Jan	8	15th	4000
Feb	8	Ck 399	4000	Feb	8	16th "	4000
Mar	8	Ck 420	40 -	Mar	8	17th "	4000
Apr	8	Ck 441	40 -	Apr	8	18th "	4000
May	8	Ck 462	40 -	May	8	19th "	4000
June	9	Ck 482	40 -	June	8	20th "	4000
July	8	Ck 503	40 -	July	8	21st "	4000
Aug	8	Ck 528	40 -	Aug	8	22nd "	4000
Sept	8	Ck 5[illegible]	40 -	Sept	8	23rd "	4000
Oct	8	Ck 571	40 -	Oct	8	24th "	4000

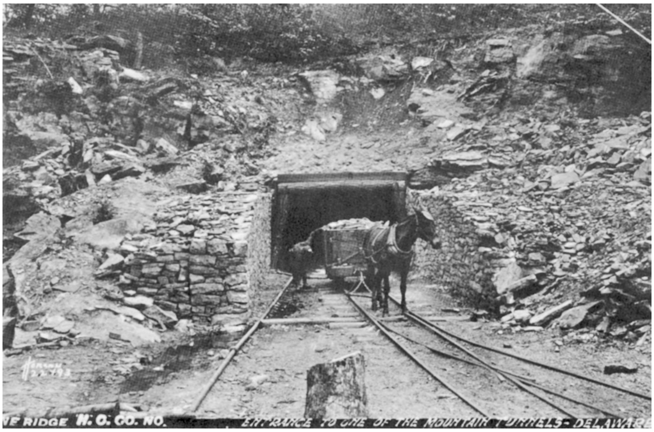
Mary Ostrosky, in Pancoast Relief Fund compensation ledger, 1911. Courtesy of Pennsylvania Historical and Museum Commission, Anthracite Heritage Museum



Uta Naka, looking from the Catlin House, Lackawanna Historical Society, to St. Thomas Hall, University of Scranton, 2016. Photo by Olivia Bernardi, used with permission

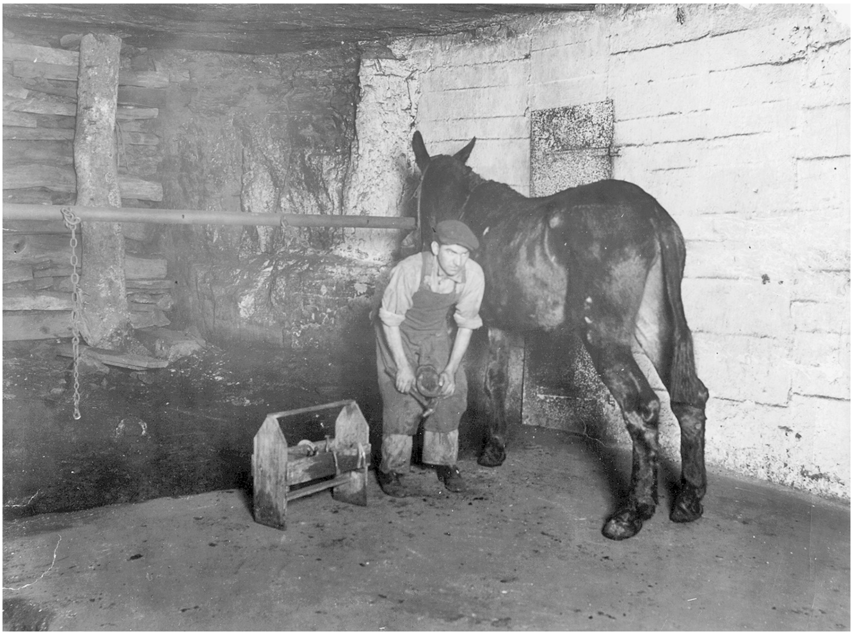

HORGAN 22393
N. C. CO. NO.
OLD MULE 28 YEARS HAULING 3 MINE CARS INSIDE

Mule with empty mine cars, undated. Courtesy of Lackawanna Historical Society


HORGAN 22493
NE RIDGE N. C. CO. NO.
ENTRANCE TO ONE OF THE MOUNTAIN TUNNELS - DELAWARE

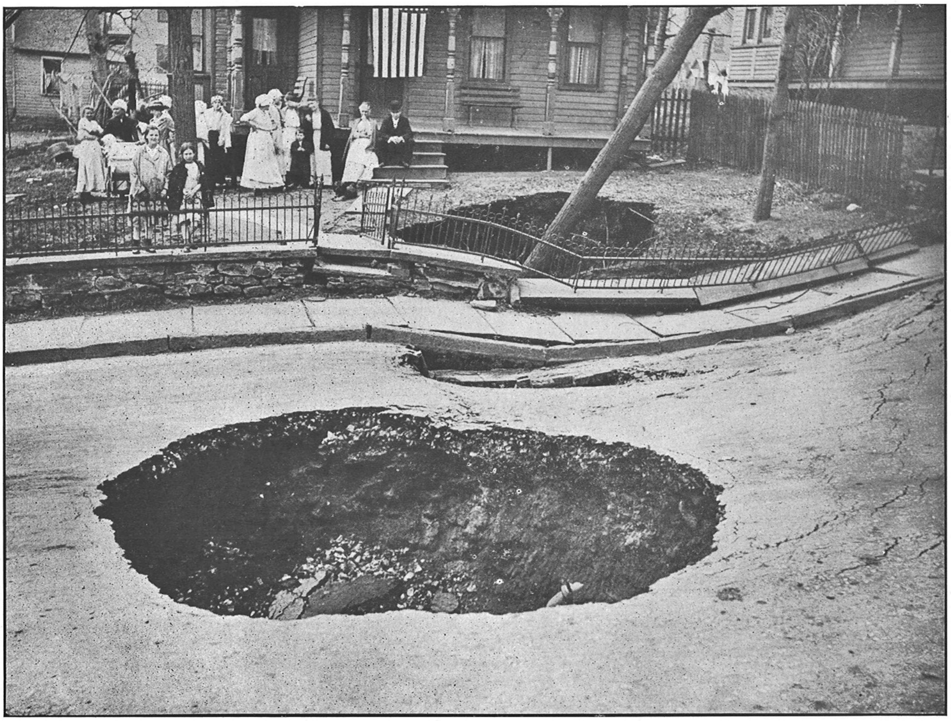
Mule with mine car outside of mine, undated. Courtesy of Lackawanna Historical Society

Mules and men, undated. Courtesy of Lackawanna Historical Society



Shoeing a mule, undated. Courtesy of Lackawanna Historical Society

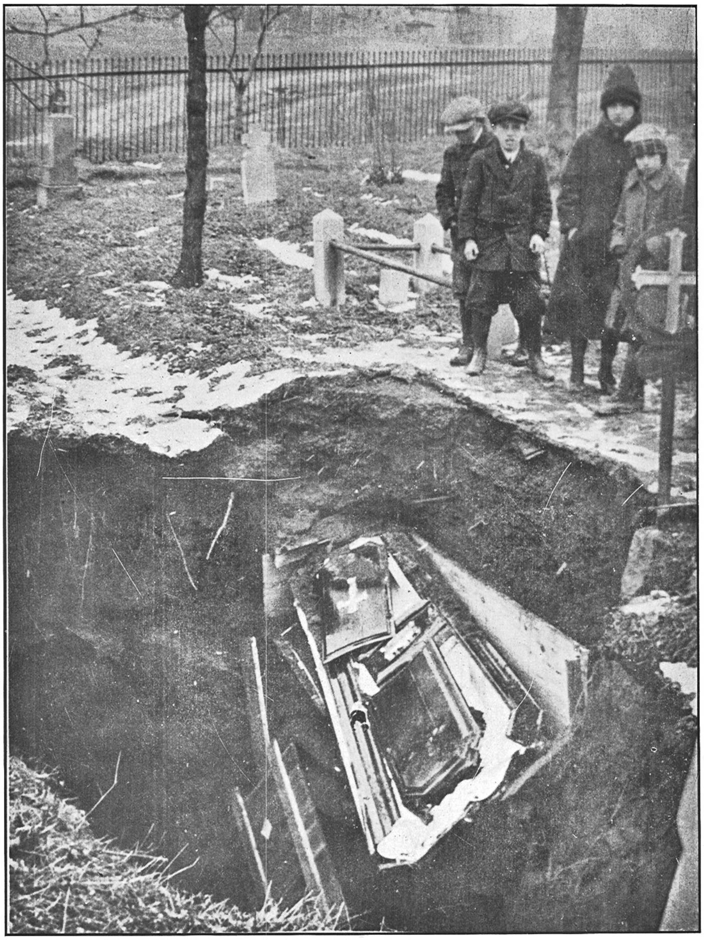
WHAT A FIRE TRUCK, RESPONDING TO AN ALARM, JUST MISSED



While responding to a fire alarm, William Frey, of Taylor, Pa., near Scranton, Pa., a truck driver, just missed dropping the fire fighting apparatus into this 30-foot pit on a main thoroughfare. Quick action on the part of the driver saved the lives of these firefighters.

Mine subsidence, Taylor, ca. 1921. Courtesy of Lackawanna Historical Society

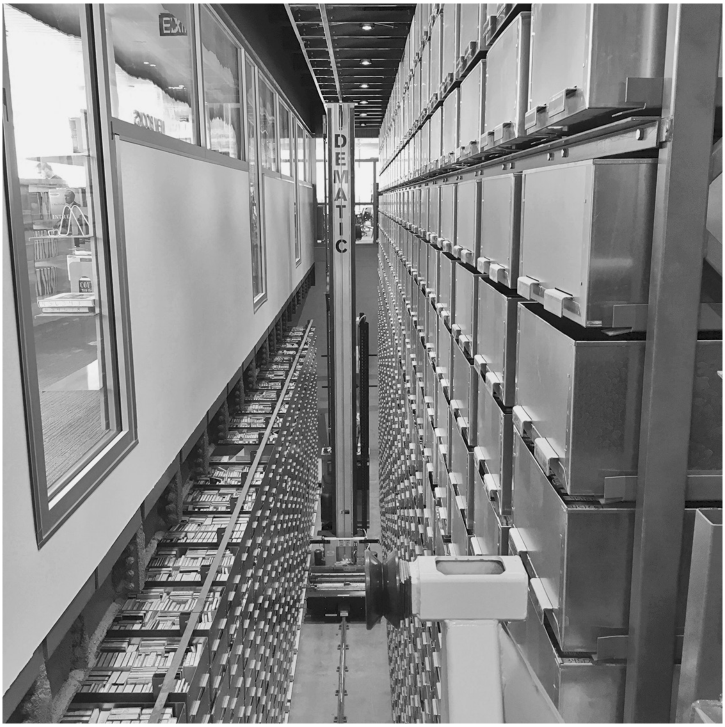
GRAVES OF THE DEAD ROCKED BY MINE CAVES



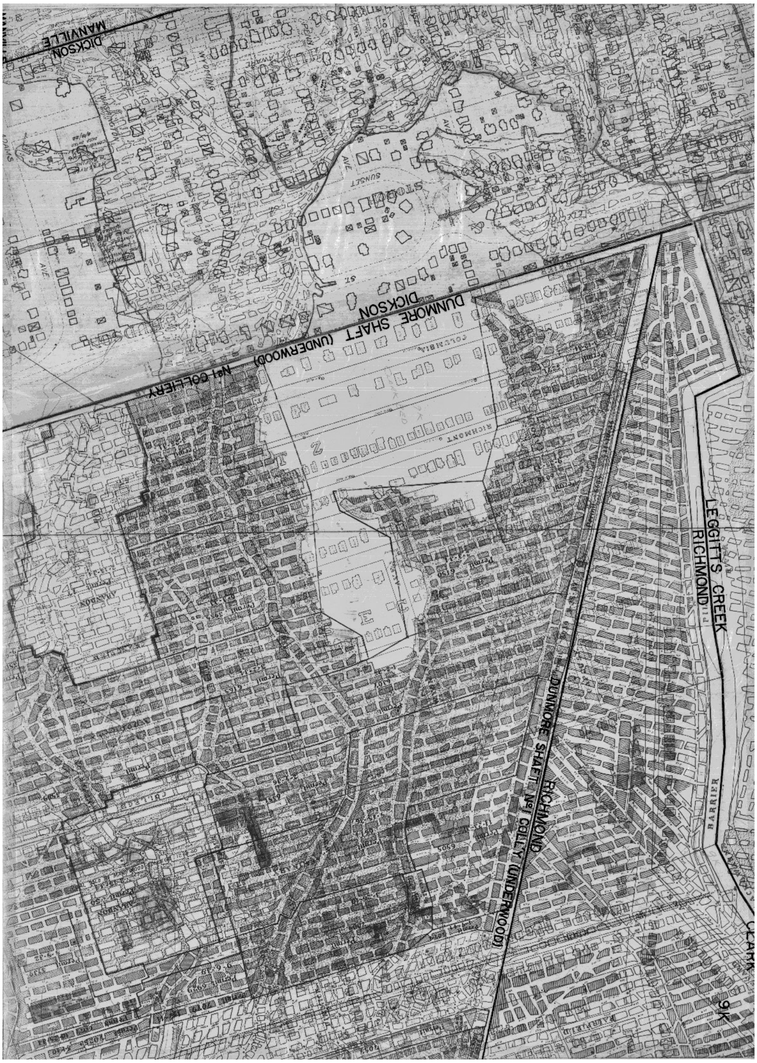
The last resting place of a well known Scranton, Pa., woman, whose grave was torn open, a few weeks after burial, by a mine cave, in Cathedral Cemetery, where hundreds of bodies have been dropped into the mine beneath. The casket is shown in the pit, torn asunder, and the hand of the corpse is seen protruding from the burial case.

Mine subsidence, Cathedral Cemetery, Scranton, ca. 1921.
Courtesy of Lackawanna Historical Society

Rotunda dome, completed 1937, Liberal Arts Center, Marywood University.
Courtesy of Marywood University



Automated Storage and Retrieval System, Learning Commons, Marywood University, 2016. Author photo, used with permission


MANVILLE
DICKSON
SUNSET
DUNMORE DICKSON
No1 COLLIERY DUNMORE SHAFT (UNDERWOOD)
RICHMOND
LEGGITTS CREEK
RICHMOND
DUNMORE SHAFT No1 COLL'Y (UNDERWOOD) RICHMOND
BARRIER
CLARK
9K

Clark vein under Marywood University, undated. Marywood is located in the lower left corner. Courtesy of Bureau of Abandoned Mine Reclamation, Pennsylvania Department of Environmental Protection

With ecology at its core, the homecoming major would teach students ecological and economic boundaries, impress upon them that no costs may be externalized, and show them that a "high level of uncertainty" attends taking account of where they are. Approaching problems through an acknowledged ignorance rather than an assumed expertise, graduates would engage in a "massive salvage operation to save the vulnerable but necessary pieces of nature and culture and to keep the good and artful examples before us." To accomplish this work would be to move "society to measuring its progress by how independent of the extractive economy it has become." The ultimate lesson: homecomers would learn how unknowable their homes are; the more they stretch beyond surfaces, the more the reality of home would escape their grasp.[14]

In 2009, a homecomer addressed graduates at Northern Kentucky University. Wendell Berry called on colleges to practice "local adaptation," which means answering a "curriculum of questions" about their places. The eight questions he posed cannot be answered, he noted, by a "specialist, or by many specialists working in isolation. They *can* be asked, and eventually answered to a significant extent, by a conversation across the disciplinary boundaries." The questions: "What has happened here? What should have happened here? What is here now? What is the nature, or genius, of this place? What will nature permit us to do here without permanent damage or loss? What will nature help us to do here? What can we do to mend the damages we have done? What are the limits: Of the nature of this place? Of our intelligence and ability?" Answering these questions, which would reveal a slew of problems, would require the kinds of knowledge already taught, but it would also demand a "conversation [that] would collapse the rigidly departmented structure" of universities. The result, though, would be "a vital, wakeful society of local communities elegantly adapted to local ecosystems."[15]

Anticipating that some may excuse universities from responsibility for threats to the earth, Berry countered that "well-educated people, not illiterates, are wrecking the planet." And many of them mine specialist niches, their heads down, unaware of wider contexts. A reorientation of priorities, the homecoming major implies, for Berry and Jackson, a life of wide attention, not narrow careerism; a love of place, not abstract patriotism. Rather than pile arcane information alone, the homecomer would work with neighbors to solve local problems, which, inevitably, would trace back to interrelationships between humans and the more-than-human world, near and far. Much is at stake: Berry was certain that resource extraction will make Kentucky, his home grounds, uninhabitable in the next hundred years.[16]

Town-gown relationships can be tricky. Facing financial meltdown, Scranton wants universities and other nonprofits to pay taxes; if not, the city expects substantial payments in lieu of taxes (PILOTs). If nonprofits use city services, the reasoning goes, they should help to pay for them. Promising to "aggressively pursue the large non-profits," Scranton included in its 2013 budget a PILOT line item of $1.3 million, a sixfold increase from 2012, when nonprofits volunteered $203,780. Nonprofits reply that they employ city residents, offer unpaid services, and do business with local vendors. Tensions have bled into controversy over, for example, University of Scranton building projects; in 2013 the city council balked at demolition of a university building, a city landmark, despite the council's own historical review board having approved the project. The council backpedaled, but it took court reversal of a zoning board decision for the university to build on the site.[17]

Town-gown ties should not be so tense. Democracies need liberal arts education to maintain an active public sphere populated by citizens who argue with empathy, think critically, and refuse to be silenced by authorities or peers. Without a critical mass of such people, democracy fails. Possible examples to emulate, US Catholic colleges often require students to complete six credits in philosophy, plus religious studies, which, like other liberal arts subjects, and unlike most courses in preprofessional and professional majors, teach students how to understand arguments about moral dilemmas, ethical choices, character, justice, and responsibility. After all, as Marywood IHMs might say, "The thing being made in a university is humanity . . . responsible heirs and members of human culture."[18]

■ ■ ■

Marywood may have worked the Statue of Liberty into its *Mural of Christian Education*, but it was not the only Scranton school to use Lady Liberty to promote itself. A photograph of her appeared in 1906 in a book commemorating the fifteenth anniversary of International Correspondence Schools (ICS). A Scranton-based business, ICS opened in response to the Mine Safety Act of 1885, which required miners to pass a mine safety exam. Instantly popular, within eight years the schools expanded into "ornamental design, commercial education, and . . . forty other engineering trades." Soon one of the largest educational institutions in the world, ICS celebrated in 1906 its meteoric success at the same time that its local graduates carved voids beneath homes they hoped to purchase.[19]

To sell education as the path to better-paying work, ICS relied heavily on people's faith in upward mobility. An ICS ad from May 1911, for example, "On Which Side of the Desk Are You?" tells the reader, "The man before the desk works with his hands and is paid for his *labor*. The man behind the desk works with his head and is paid for his *knowledge*. It is merely a question of KNOWING HOW." Proclaiming that "I.C.S. actually takes the workingman by the hand and helps him to prosperity," a September 1911 ad shows a worker stepping uncertainly up a rock pile, his hand grasped by a man in a suit standing above on a smooth road that leads straight to another man in a suit, who sits at a desk inside an office. Few of the ads I've seen show men in mines.[20]

ICS advertising took to the streets in 1916, the year the schools turned twenty-five and Scranton turned fifty. As part of city celebrations, on October 3 more than fourteen thousand people, mainly grammar and high school students, marched through downtown in an education parade. ICS made a big showing, its floats capping the line of the march. Leading its division walked 1,500 faculty and staff, the faculty carrying "huge writing pens," which they must have shouldered like rifles.[21]

ICS probably assumed that among parade-goers stood laborers looking for higher pay, managers angling for promotions, and mine workers searching for new possibilities. To tell "the story of the I.C.S. code, that hard work . . . spells success," the schools christened floats "Science," "Ambition," "Determination," "Improvement," "Promotion," "Perseverance," "Achievement," and "Contentment." The float "Determination," for example, depicted a "young man burning the 'midnight oil' "; his hard work gets rewarded in "Contentment," which "carried a man seated in his library, his happy, smiling wife seated in a big chair opposite him, with a little girl on her knee."[22] The lesson: education creates easy living, among books, which represent not only acquired knowledge but also a leap in social class that affords one the money to buy them and the time to read them.

The day before the parade, Russell Conwell, president of Temple University, addressed ICS salesmen in a talk titled "Scranton's Part in the Preservation of American Liberty." Advocating "compulsory education," the minister asserted—in language reminiscent of Frederick Douglass—that blacks in the south remained as enslaved in 1916 as prior to the Civil War: "No man emerges from slavery unless he emerges from ignorance." Nodding to recent waves of immigration, he "complained that the condemnation of hyphenates is being carried to extremes" and concluded with a "big tribute" to ICS, noting that "Scranton has carried knowledge into the homes of the poor." Despite his brevity, Conwell may have disappointed his audience because he didn't launch into his wildly popular "Acres of Diamonds," a lecture he had already presented more than five thousand times and that had appeared in book form only the year before.[23]

Stringing together success stories, "Acres" opens in Mesopotamia—a birthplace of human civilization—with an Arab guide telling Conwell a story set in the Indus Valley, another cradle of civilization. In the guide's story, a Buddhist priest tells a rich farmer that diamonds could bring him wealth beyond dreams. After the now-discontented man sells his land, he searches the world, finds no diamonds, and kills himself (6). Meanwhile, the man who buys his farm discovers diamonds in the farm garden, which, the Arab claims, becomes the "diamond-mine of Golconda, the most magnificent diamond-mine in all the history of mankind," yielding crown jewels, emblems of empire for England and Russia (8). The moral of the story: had the first farmer stayed home and dug "in his own garden, instead of wretchedness, starvation, and death by suicide, he would have had 'acres of diamonds' " (8).

Not to be outdone, Conwell responds to the Arab guide with stories set in the United States. The first: to afford prospecting for gold in Southern California, a farmer sells his land to John Sutter, whose luck sparks the Gold Rush (9). The second: a Pennsylvania man learns everything about oil, lands a job in Canada, and sells his farm, leaving the purchaser to found Titusville, a source of the oil business (10–12). The third story: a mining engineer sells the family farm in Massachusetts to take up copper mining in Wisconsin; the engineer finds no copper and the company goes bankrupt, but the new man on the homestead gets rich when he unearths a block of silver (13, 14).

Stories matter: they reveal worldviews. "Acres" taps a rich vein of American beliefs in self-sufficiency, individualism, and self-righteousness. Through stories of over-the-top, uncommon success—the California gold rush, the discovery of oil, the origin of crown jewels—Conwell promotes one idea: upward mobility. But he doesn't tell rags-to-riches tales; he relates stories of the already successful. In each, a fool owns a farm that he sells to finance getting richer elsewhere; the purchaser has enough money to buy. A free agent, each man has few obligations to others beyond business transactions, and neither needs give thought to tearing up his garden for riches, which, note, the purchaser always finds accidentally. Intended to extol hard work and a clear vision, the stories turn on blind luck. The common thread, though, ties people to place: everyone should know who he is and where he is and exploit the opportunities there. Stay home, dig in, and make money. Not exactly, however, the digging that Jackson and Berry have in mind.

This "gospel of success" leaves little room for those without money, power, or property (170). Philanthropists, Conwell cautions, should attend only to the "deserving" poor, "those who cannot help themselves" (21). For the majority of poor people, however, their poverty is due to their "own shortcomings" (21). Refusing to do his duty—"I say that you ought to get rich, and it is your duty to get rich" (18)—the poor man stays poor because "God has punished [him] for his sins, thus to help him . . . is to do wrong, no doubt about it" (21). Since "the number of poor who are to be sympathized with is very small" (21), no one needs to remember the rest, his listeners may think, despite the fact that Conwell used proceeds from each lecture to help a list of young men work their way through college (162).

The widespread myth that diamonds come from coal might excuse Scrantonians for scratching their heads at Conwell's lecture. For fifty years, they had been busily digging beneath their gardens, undermining the entire city to send black diamonds across the country. And still not every Scrantonian had struck it rich. For the few, acres of diamonds may be "opportunities to get largely wealthy," but once the acres have been mined, which, city residents knew, required the coordination of scores of men who could not keep the diamonds they handled, the story of extraction becomes a story of joblessness, migration, and subsidence (18).

"Acres of Diamonds" still moves listeners, including college students. Temple University embraces the lecture as the "inspiration for the university's mission," and the "Acres" philosophy stands behind the university motto, "Perseverance Conquers." Temple evolved from Conwell's tutoring an aspiring minister into a schedule of evening courses that educated "working people who could only attend class at night." Serving today more than thirty-five thousand students, the university requires in its general education program the "Philadelphia Experience," which blends class time and "real encounters in the city and region." The course War in Hazleton, for example, uses "film, field-trips, guest speakers, fiction and poetry" to examine how the "town reacted to a sudden influx of 10,000 Spanish-speaking laborers."[24]

As does Temple, Marywood uses communication technologies to bridge not only temporal gaps between school and home, but also spatial ones. A partnership that includes Marywood, the African Sisters Education Collaborative offers leadership and financial training to women religious working in Nigeria and five other sub-Saharan nations.[25] In 2012, the collective launched the program Higher Education for Sisters in Africa, which Peter Kilcullen cited not only as evidence of Marywood's global reach but also as proof of the difference between education and job training. As part of enabling sisters to earn college degrees, Marywood English instructors teach writing via the latest correspondence method, the Internet.

■ ■ ■

Stories enthrall people, and it sometimes takes a second story to free one from the first—often a master narrative that dominates how we think about the world. In *Things Fall Apart*, Chinua Achebe answers a story, one that the itinerant Joseph Conrad, whether knowingly or not, offered in *Heart of Darkness*: Africans are without history, culture, self-awareness. Depicting a place as it was prior to European colonization, the novel teaches lessons about education, history, and the power of writing. *Things Fall Apart* defends the complexity of home by expressing many kinds of stories: male and female, father and son, colonizer and colonized.

The main character, Okonkwo, a farmer and warrior, tries to keep his familiar world intact. Driven to succeed, he wrestles with change as much as he wrestles with the ghost of his happy-go-lucky father. Despite his attempts to maintain the world he knows, his friends question the status quo, others fall into inattention, and outsiders assault village life. After returning from exile for accidently killing a kinsman, Okonkwo believes that he can recapture his place among the clan's leaders. He cannot accept, though, that so much has changed since he was last at home. When a lackey for Europeans demands that a village crowd disperse in silence, Okonkwo stands his ground and kills the messenger. He expects his neighbors to rally to him, but they abandon him, fleeing, crying, "Why did he do it?"[26] Rather than submit to things falling apart, Okonkwo walks away, silent; to cut ties with people he thought he was defending, he hangs himself.

Village life is not idyllic in *Things Fall Apart*; it's a hard life. Slash-and-burn agriculture wears out land; prolonged drought threatens crops. People leave twins in the forest to die, a rigid class hierarchy rules, and women are second-class citizens. But the village rules itself; it comes together and falls apart in its own way in response to time and place. Life changes radically when Europeans cheat and subjugate the region: colonial soldiers massacre the village of Abame to avenge the murder of a white man; Christian missionaries plot to undermine the people's religion; a white colonial official, acting as judge and jury, imprisons the *egwugwu*, elders of the clan who administer justice. Historically, all this happens sometime around 1905, when the British were moving into this part of Nigeria.[27]

In *Things Fall Apart*, homegrown oral storytelling gives way to distant schools staffed by literate strangers. As he matures, Nwoye, Okonkwo's oldest son, hears two kinds of stories "of the land": his mother's "folk stories" and his father's "masculine stories of violence and bloodshed" (33, 58). Recounting a mythic past, his mother's stories explain the origins of the universe, suggest answers to questions about being and knowing, and connect humans with the world around and beyond them.[28] About individual heroism, Okonkwo's stories describe "tribal wars, or how, years ago, he had stalked his victim, overpowered him and obtained his first human head" (33). Nwoye pretends to hear his father's stories—mainly so his father will not beat him—but remains attracted most to his mother's tales (33). Ultimately, however, he embraces a third set of stories, one about "brothers who sat in darkness and in fear" (85).

When Nwoye hears Christian missionaries sing this story, the song's poetry captivates him; soon he converts to Christianity, breaking with his father, who rejects him as "degenerate and effeminate" (88). At eighteen, Nwoye leaves the village to attend the "new training college for teachers," located in the "distant town of Umuru . . . where the white man first went," a center of colonial rule (103). This training college, imported from Europe, will displace Nwoye's language with a completely new worldview, one backed by a new religion, a new trading system, and a new justice system, all founded on the written word of sacred texts, contracts, and laws. Separating education from home, the colonial school system relegates oral stories to the village; written stories depict other, far-off places, likely—and mostly—Britain. With plans to return home to teach, Nwoye will unwittingly instruct his family and friends to see the world through the eyes of the colonizer.

Within the world of the novel, written stories prevail. The whites' leader, the District Commissioner, sees Okonkwo's suicide not as a human tragedy but as an interesting bit of anthropology, a moment to study. His official role as "resolute administrator" complements his hobby as "student of primitive customs" (117): his power to rule renders him an interpreter of what he doesn't understand—and doesn't feel the need to understand—surrounded as he is by an "armed band of soldiers and court messengers" (116). The reader ends the novel seeing its events not from the point of view of a villager but from the perspective of the commissioner, who has "toiled to bring civilisation to different parts of Africa" and plans to write about his experiences (117). His book will offer distant Europeans a glimpse of Africa through his eyes; his fellow Europeans will not see Okonkwo's story as we have experienced it in reading the novel. Instead of knowing a story rich in detail, a human story, Europeans will see Okonkwo reduced to a "reasonable paragraph," at best, because the commissioner "must be firm in cutting out details" (117). The final words of *Things Fall Apart*, the title of the commissioner's book sums up his perception of Africa, which is emblematic of Europe's at the time: *The Pacification of the Primitive Tribes of the Lower Niger* (117).

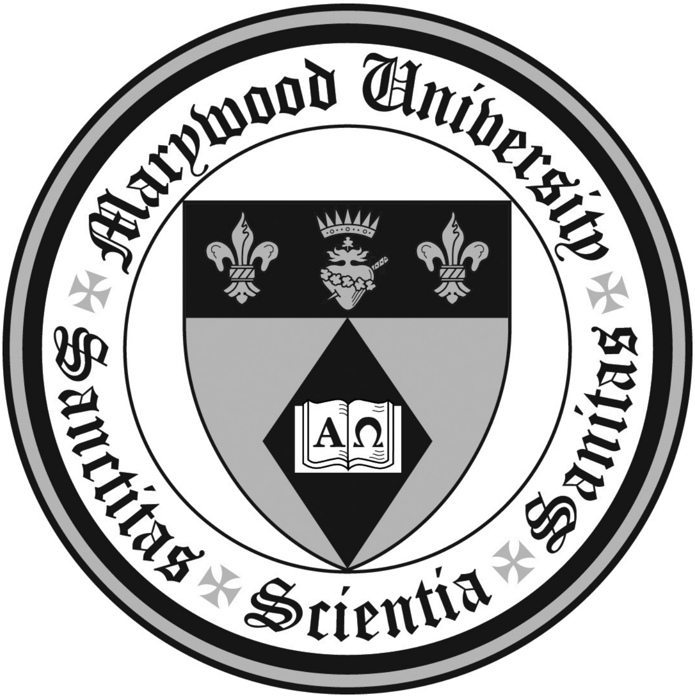
Storytelling matters. *Things Fall Apart* answers, in part, the view of Africa that Joseph Conrad offers in *Heart of Darkness*. In a speech at the University of Massachusetts, Amherst, in 1975, Achebe goes so far as to call Conrad a "thoroughgoing racist." This speech, which still generates controversy, begins with him describing a chance encounter with a man, presumably an Amherst colleague, who wears cultural blinders. As they cross campus, this man mentions that he's "always surprised" to learn that Africa has a history or a literature. His inability to imagine that Africans have their own stories represents, Achebe points out, the West's understanding of Africa: empty of culture. Such willful blindness serves the West as a convenient excuse to transplant its stories onto a continent that it only knows, as Marlow does, as white space on a map. Achebe accuses Conrad of racism because he offers no "alternative frame of reference" to that of his narrator Marlow's one-dimensional portrayal of Africans as "savage" and "wild-eyed." For Achebe, this inability, or unwillingness, to present an alternative strips *Heart of Darkness* of its designation as a "great work of art," a work that sees humans as humans. A "casual visitor" to Africa, Conrad could see only half the story of the European presence there; he saw the "evil of imperial exploitation but was strangely unaware of the racism on which it sharpened its iron tooth." Writers can be dangerous.[29]

Things Fall Apart strikes a chord with some Marywood students because many do not intend to leave the region, whether out of fear of the unknown, love for home, or desire for what's comfortable. A region with one of the nation's highest average ages, it also has, or so I've heard, one of the highest rates in the country of people not moving far from home. A few students may fear becoming Nwoye, the "educated" kid who returns to convert his family to new frames of reference, ways of seeing that might question what his loved ones know. To do so would be, in their view, ungrateful.

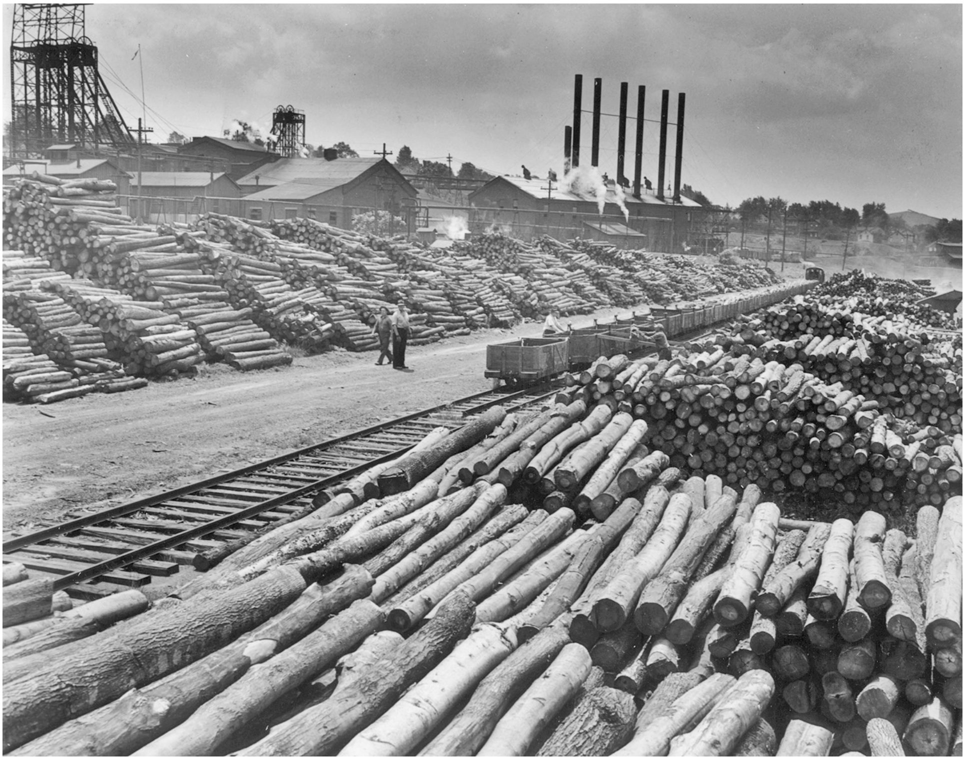
■ ■ ■

People tell stories, in part, to explain, to impose patterns on a world that escapes their grasp. Any pattern will always be only a partial explanation, no matter how much sense it makes. Some texts—often unaware of themselves as texts—mine the world, taking and never giving back. The best literature, though, brings the world to mind; it shows me the world in its aliveness.

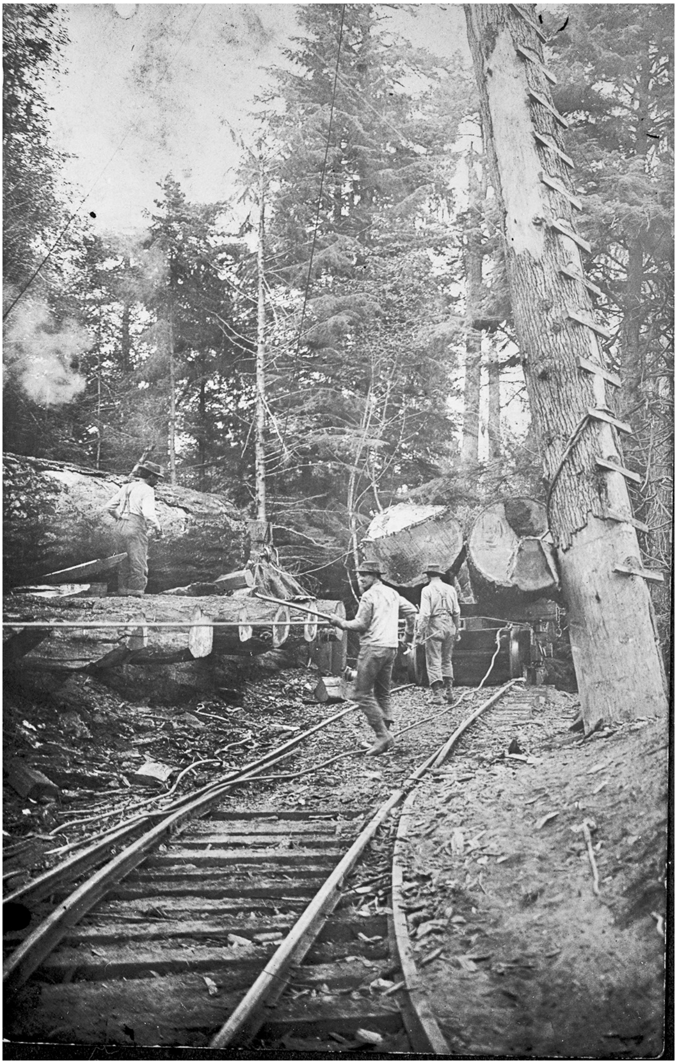
My life would be poorer, I believe, if I had no access to good stories. Without them, I wonder whether I would have more trouble distinguishing between the appearance and the reality of what ennobles life and what degrades it. Reading about life's nettlesome questions helps me to know that I'm not alone in confronting suffering and death or in expressing awe and joy. Liberal arts learning, life experience, and the practical skills I learned from farm and factory have contributed to the patterns behind how I make judgments, argue about distinctions, and participate in civic life. Above all, maybe, reading with others helps me to satisfy my need to discover and to articulate connections among person, place, and planet.


Marywood University
Sanctitas
Scientia
Sanitas
A Ω

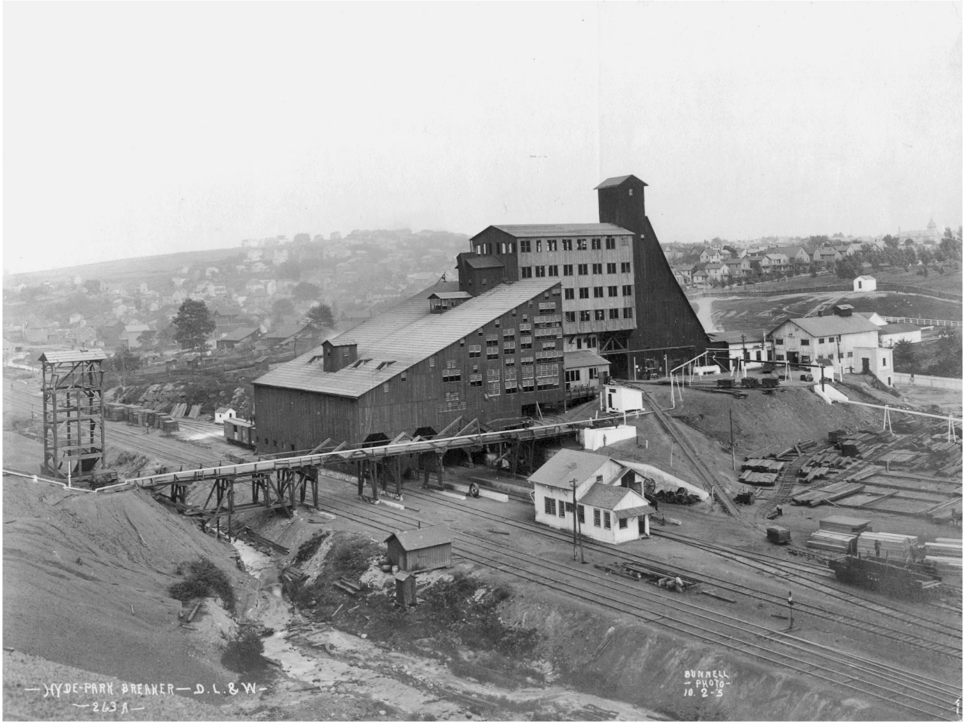
Marywood University seal, 1949. Courtesy of Marywood University



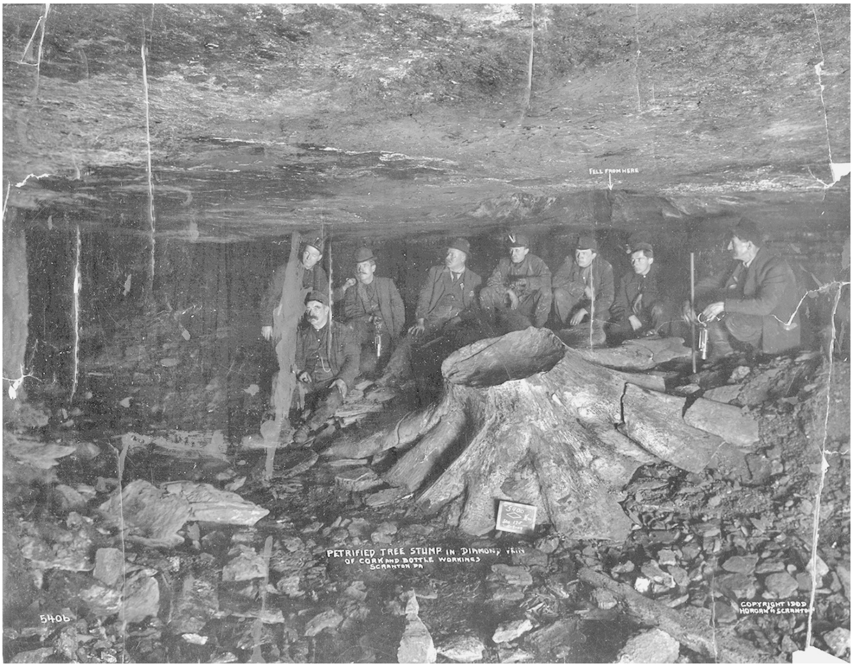
Grassy Island colliery timber yard, Olyphant, undated. Courtesy of Lackawanna Historical Society



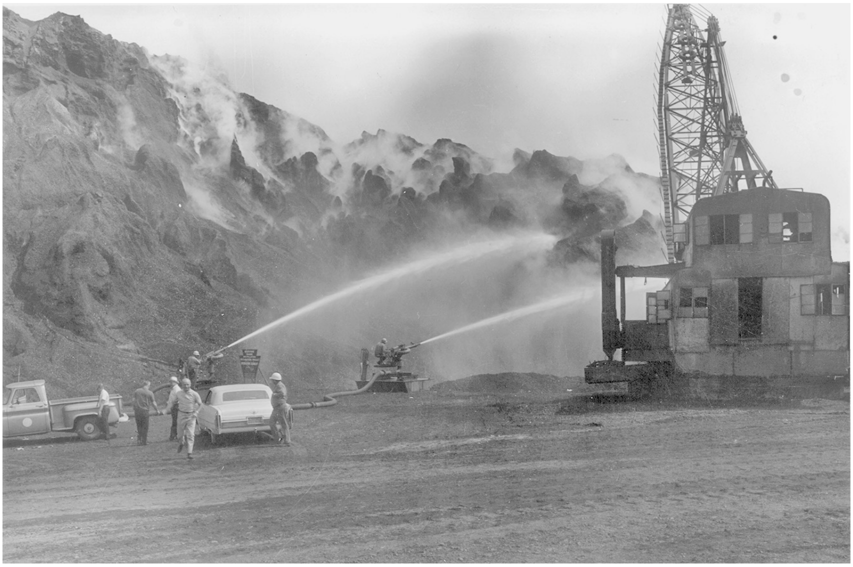
High line landing, Conlogue Brothers' Lampa Creek logging site, 1910. Photo by Jack Slattery, courtesy of Coos History Museum & Maritime Collections, 992-8-0528


—HYDE-PARK BREAKER—D.L.&W—
—263 A—
BUNNELL
—PHOTO—
10. 2-5

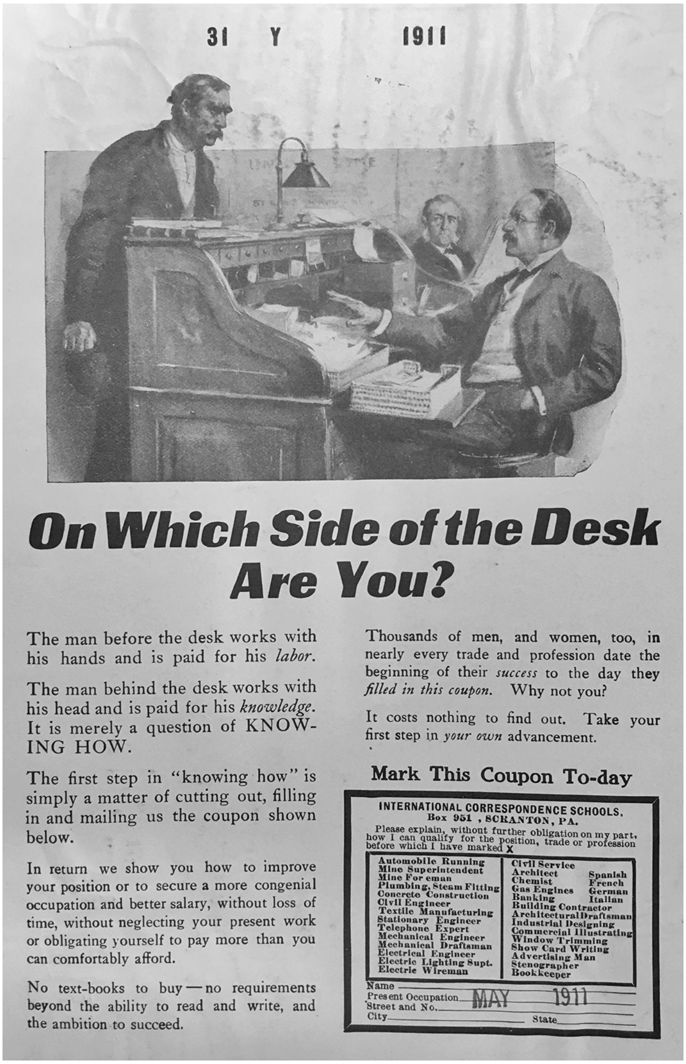
Hyde Park coal breaker, Scranton, undated. Courtesy of Lackawanna Historical Society


FELL FROM HERE
PETRIFIED TREE STUMP IN DIAMOND VEIN OF CORK AND BOTTLE WORKINGS SCRANTON PA
5406
COPYRIGHT 1909 BY HORGAN SCRANTON

Petrified tree stump found in Diamond vein of Cork and Bottle Workings, Scranton, 1909. Courtesy of Lackawanna Historical Society



Extinguishing the Marvine culm bank fires, Scranton, 1968. Courtesy of Lackawanna Historical Society



31 Y 1911

On Which Side of the Desk Are You?

The man before the desk works with his hands and is paid for his *labor*.

The man behind the desk works with his head and is paid for his *knowledge*. It is merely a question of KNOWING HOW.

The first step in "knowing how" is simply a matter of cutting out, filling in and mailing us the coupon shown below.

In return we show you how to improve your position or to secure a more congenial occupation and better salary, without loss of time, without neglecting your present work or obligating yourself to pay more than you can comfortably afford.

No text-books to buy — no requirements beyond the ability to read and write, and the ambition to succeed.

Thousands of men, and women, too, in nearly every trade and profession date the beginning of their *success* to the day they *filled in this coupon*. Why not you?

It costs nothing to find out. Take your first step in *your own* advancement.

Mark This Coupon To-day

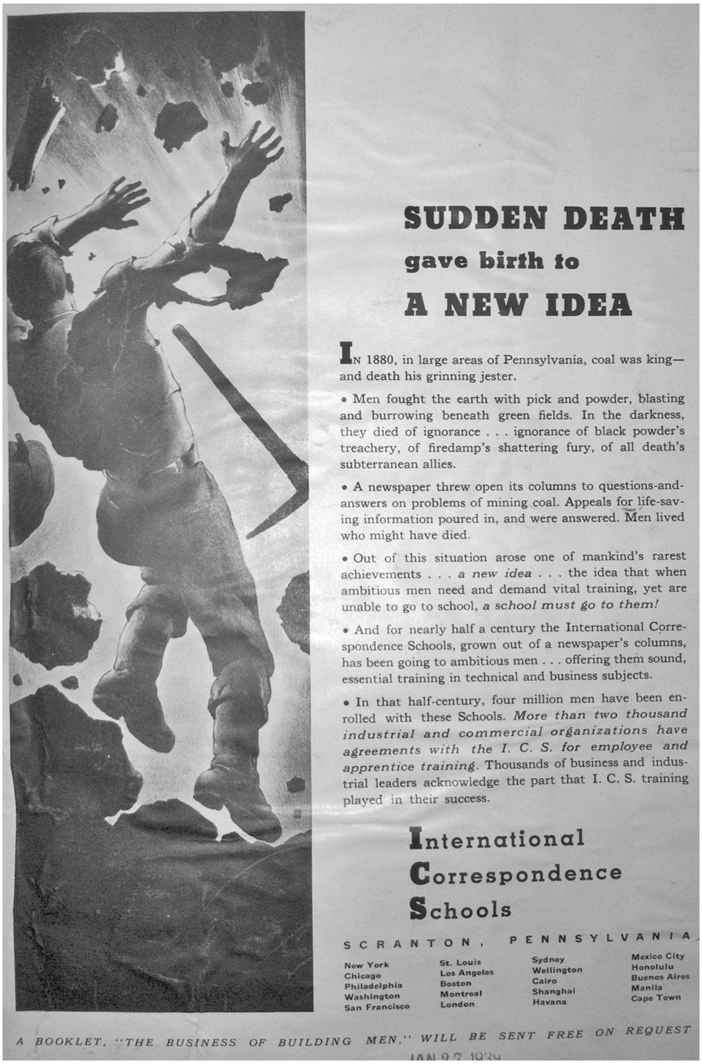
INTERNATIONAL CORRESPONDENCE SCHOOLS,
Box 951 , SCRANTON, PA.

Please explain, without further obligation on my part, how I can qualify for the position, trade or profession before which I have marked X

- Automobile Running
- Mine Superintendent
- Mine Foreman
- Plumbing, Steam Fitting
- Concrete Construction
- Civil Engineer
- Textile Manufacturing
- Stationary Engineer
- Telephone Expert
- Mechanical Engineer
- Mechanical Draftsman
- Electrical Engineer
- Electric Lighting Supt.
- Electric Wireman
- Civil Service
- Architect
- Chemist
- Gas Engines
- Banking
- Building Contractor
- Architectural Draftsman
- Industrial Designing
- Commercial Illustrating
- Window Trimming
- Show Card Writing
- Advertising Man
- Stenographer
- Bookkeeper
- Spanish
- French
- German
- Italian

Name __________
Present Occupation MAY 1911
Street and No. __________
City __________ State __________

ICS advertisement, May 1911. Courtesy of International Correspondence Schools Collection, McHugh Special Collections, University of Scranton



SUDDEN DEATH gave birth to A NEW IDEA

IN 1880, in large areas of Pennsylvania, coal was king—and death his grinning jester.

- Men fought the earth with pick and powder, blasting and burrowing beneath green fields. In the darkness, they died of ignorance . . . ignorance of black powder's treachery, of firedamp's shattering fury, of all death's subterranean allies.
- A newspaper threw open its columns to questions-and-answers on problems of mining coal. Appeals for life-saving information poured in, and were answered. Men lived who might have died.
- Out of this situation arose one of mankind's rarest achievements . . . *a new idea* . . . the idea that when ambitious men need and demand vital training, yet are unable to go to school, *a school must go to them!*
- And for nearly half a century the International Correspondence Schools, grown out of a newspaper's columns, has been going to ambitious men . . . offering them sound, essential training in technical and business subjects.
- In that half-century, four million men have been enrolled with these Schools. *More than two thousand industrial and commercial organizations have agreements with the I. C. S. for employee and apprentice training.* Thousands of business and industrial leaders acknowledge the part that I. C. S. training played in their success.

International
Correspondence
Schools

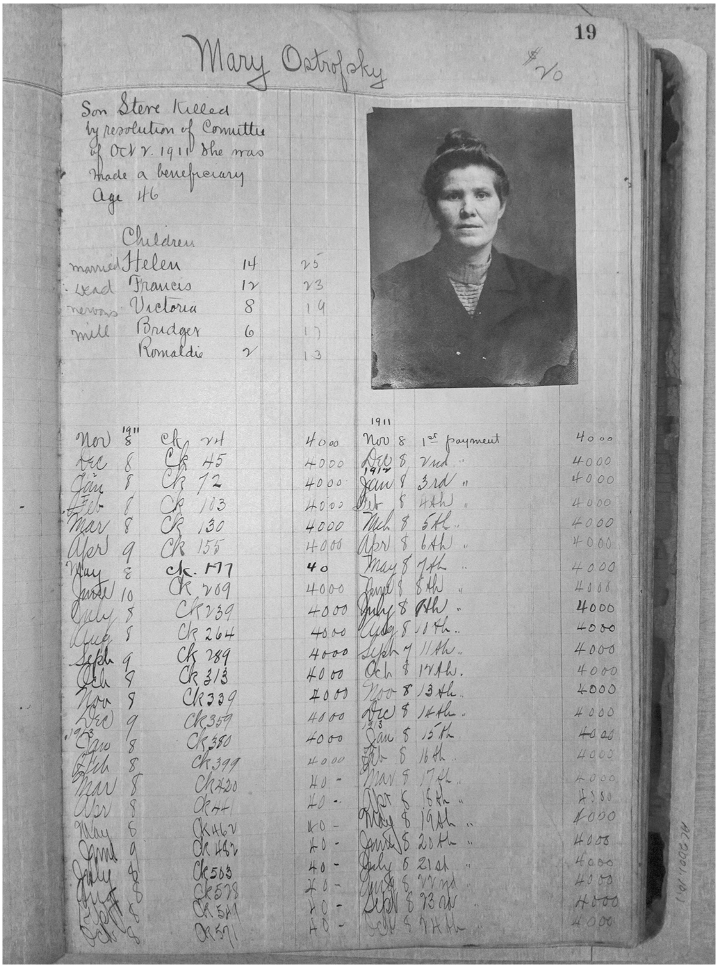
SCRANTON, PENNSYLVANIA

New York
Chicago
Philadelphia
Washington
San Francisco
St. Louis
Los Angeles
Boston
Montreal
London
Sydney
Wellington
Cairo
Shanghai
Havana
Mexico City
Honolulu
Buenos Aires
Manila
Cape Town

A BOOKLET, "THE BUSINESS OF BUILDING MEN," WILL BE SENT FREE ON REQUEST

JAN 27 1939

ICS advertisement, January 1939. Courtesy of International Correspondence Schools Collection, McHugh Special Collections, University of Scranton



19

Mary Ostrofsky

$20

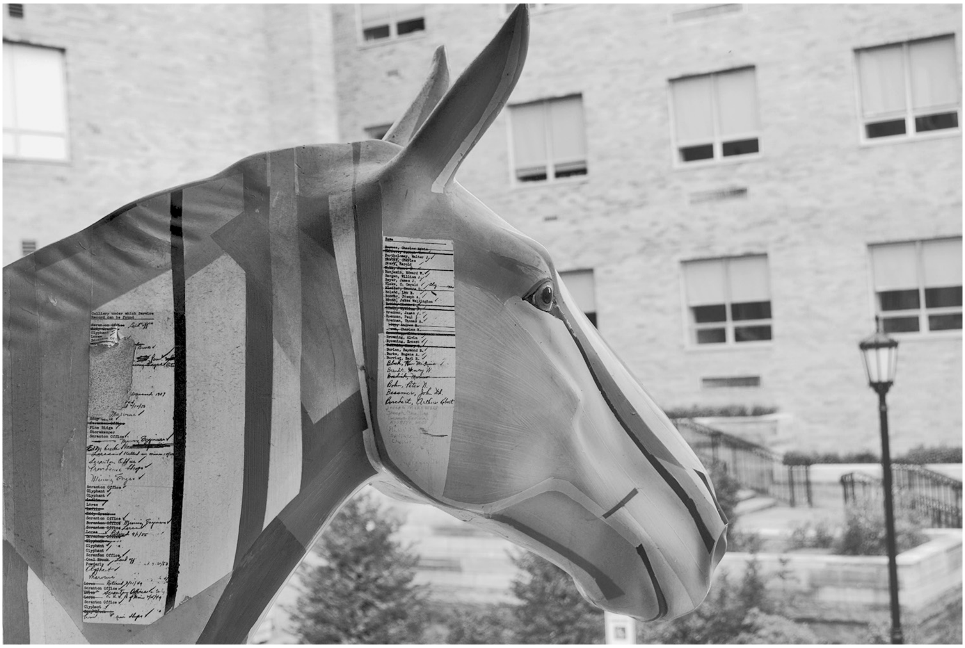
Son Steve Killed
by resolution of Committee
of Oct 2. 1911 She was
made a beneficiary
Age 46

Children

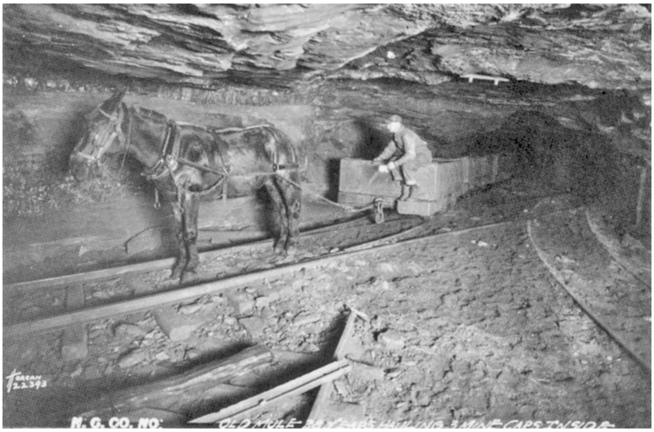
married	Helen	14	25
dead	Francis	12	23
nervous	Victoria	8	19
mill	Bridger	6	17
	Romaldie	2	13

	1911			1911			
Nov	8	Ck 24	4000	Nov	8	1st payment	4000
Dec	8	Ck 45	4000	Dec	8	2nd "	4000
				1912			
Jan	8	Ck 72	4000	Jan	8	3rd "	4000
Feb	8	Ck 103	4000	Feb	8	4th "	4000
Mar	8	Ck 130	4000	Mch	8	5th "	4000
Apr	9	Ck 155	4000	Apr	8	6th "	4000
May	8	ck. 177	40	May	8	7th "	4000
June	10	Ck 209	4000	June	8	8th "	4000
July	8	Ck 239	4000	July	8	9th "	4000
Aug	8	Ck 264	4000	Aug	8	10th "	4000
Sept	9	Ck 289	4000	Sept	7	11th "	4000
Oct	9	Ck 313	4000	Oct	8	12th "	4000
Nov	9	Ck 339	4000	Nov	8	13th "	4000
Dec	9	Ck 359	4000	Dec	8	14th "	4000
1913				1913			
Jan	8	Ck 380	4000	Jan	8	15th	4000
Feb	8	Ck 399	4000	Feb	8	16th	4000
Mar	8	Ck 420	40 -	Mar	8	17th "	4000
Apr	8	Ck 441	40 -	Apr	8	18th "	4000
May	8	Ck 462	40 -	May	8	19th "	4000
June	9	Ck 482	40 -	June	8	20th "	4000
July	8	Ck 503	40 -	July	8	21st "	4000
Aug	8	Ck 528	40 -	Aug	8	22nd "	4000
Sept	8	Ck 541	40 -	Sept	8	23rd "	4000
Oct	8	Ck 571	40 -	Oct	8	24th "	4000

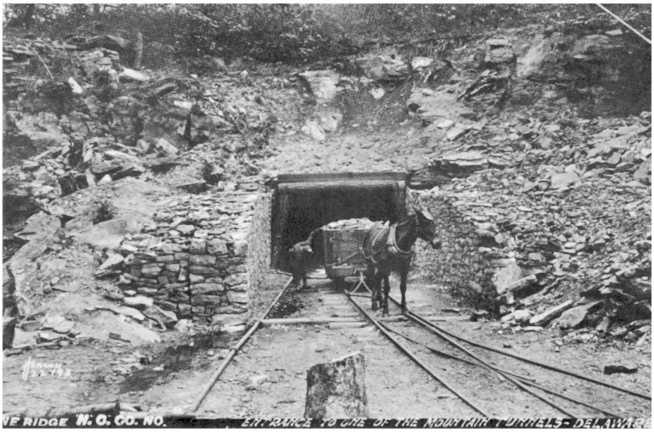
Mary Ostrosky, in Pancoast Relief Fund compensation ledger, 1911. Courtesy of Pennsylvania Historical and Museum Commission, Anthracite Heritage Museum



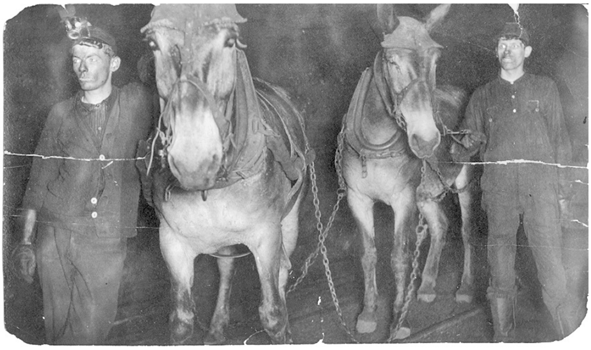
Uta Naka, looking from the Catlin House, Lackawanna Historical Society, to St. Thomas Hall, University of Scranton, 2016. Photo by Olivia Bernardi, used with permission


Horgan 22393
H. G. CO. NO.
OLD MULE 28 YEARS HAULING 3 MINE CARS INSIDE

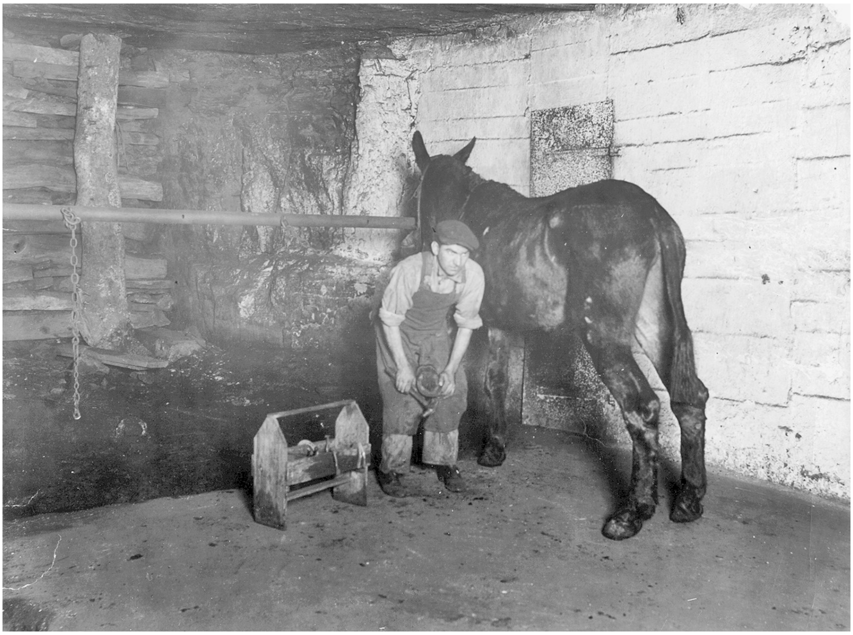
Mule with empty mine cars, undated. Courtesy of Lackawanna Historical Society


Horgan 22393
NE RIDGE H. C. CO. NO.
ENTRANCE TO ONE OF THE MOUNTAIN TUNNELS - DELAWARE

Mule with mine car outside of mine, undated. Courtesy of Lackawanna Historical Society

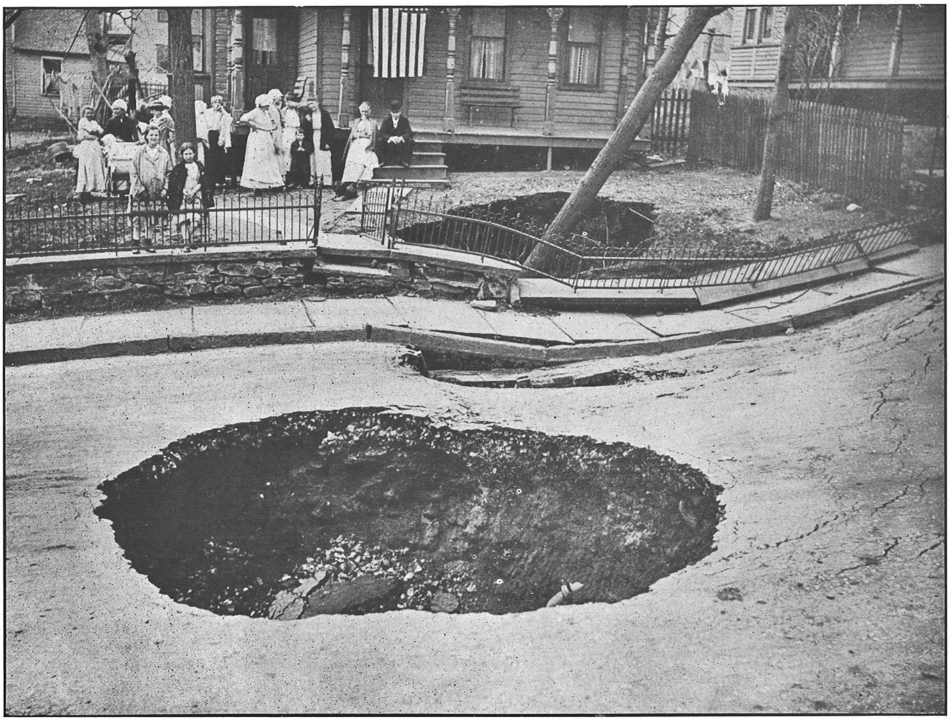


Mules and men, undated. Courtesy of Lackawanna Historical Society



Shoeing a mule, undated. Courtesy of Lackawanna Historical Society

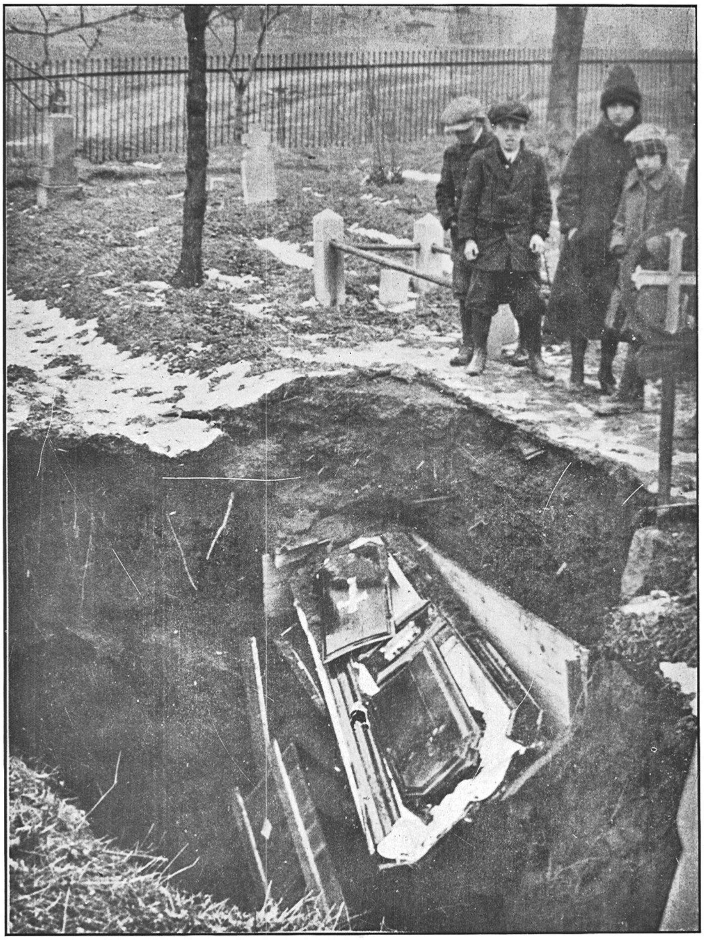
WHAT A FIRE TRUCK, RESPONDING TO AN ALARM, JUST MISSED



While responding to a fire alarm, William Frey, of Taylor, Pa., near Scranton, Pa., a truck driver, just missed dropping the fire fighting apparatus into this 30-foot pit on a main thoroughfare. Quick action on the part of the driver saved the lives of these firefighters.

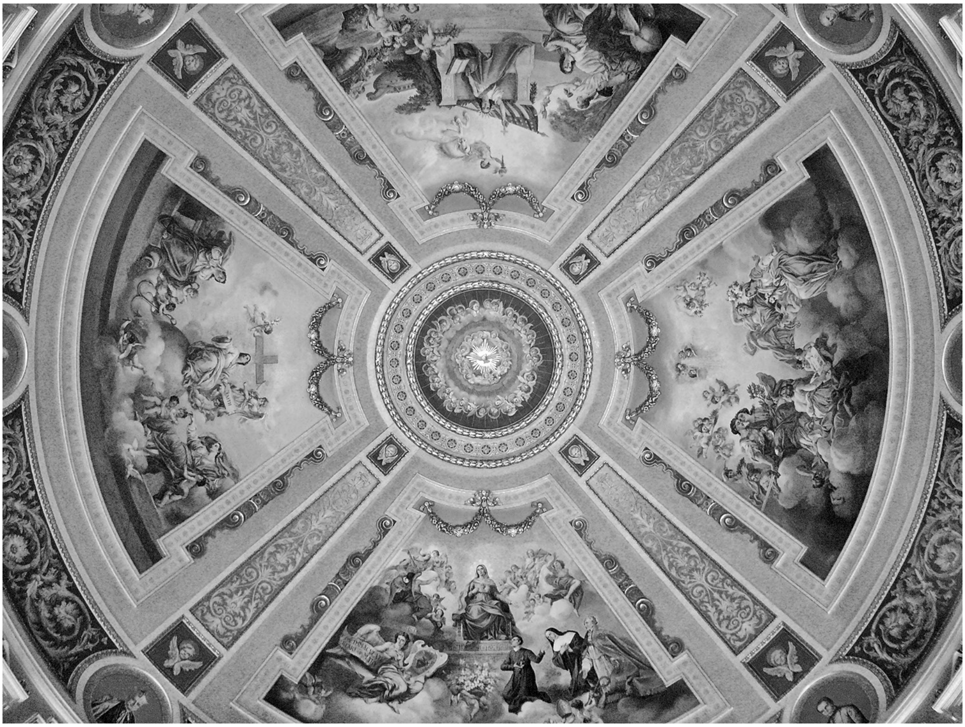
Mine subsidence, Taylor, ca. 1921. Courtesy of Lackawanna Historical Society

GRAVES OF THE DEAD ROCKED BY MINE CAVES

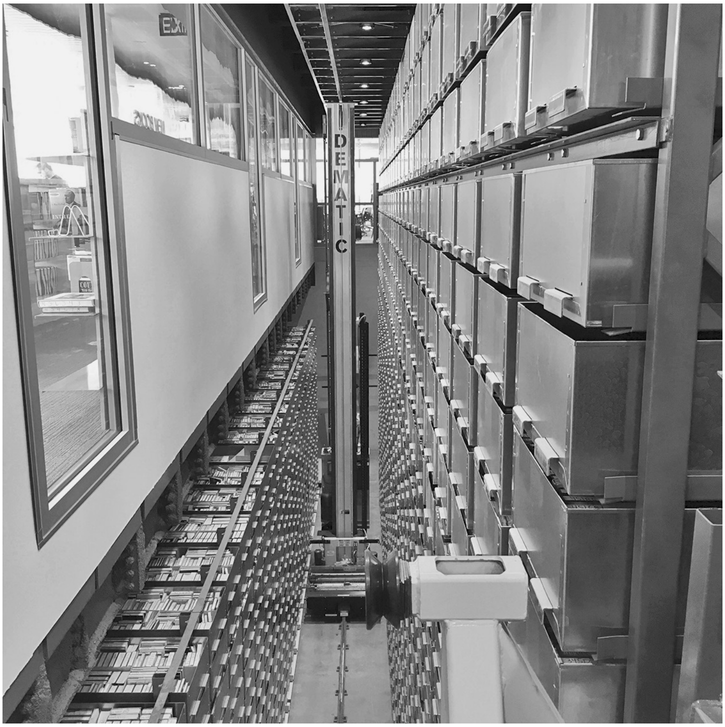


The last resting place of a well known Scranton, Pa., woman, whose grave was torn open, a few weeks after burial, by a mine cave, in Cathedral Cemetery, where hundreds of bodies have been dropped into the mine beneath. The casket is shown in the pit, torn asunder, and the hand of the corpse is seen protruding from the burial case.

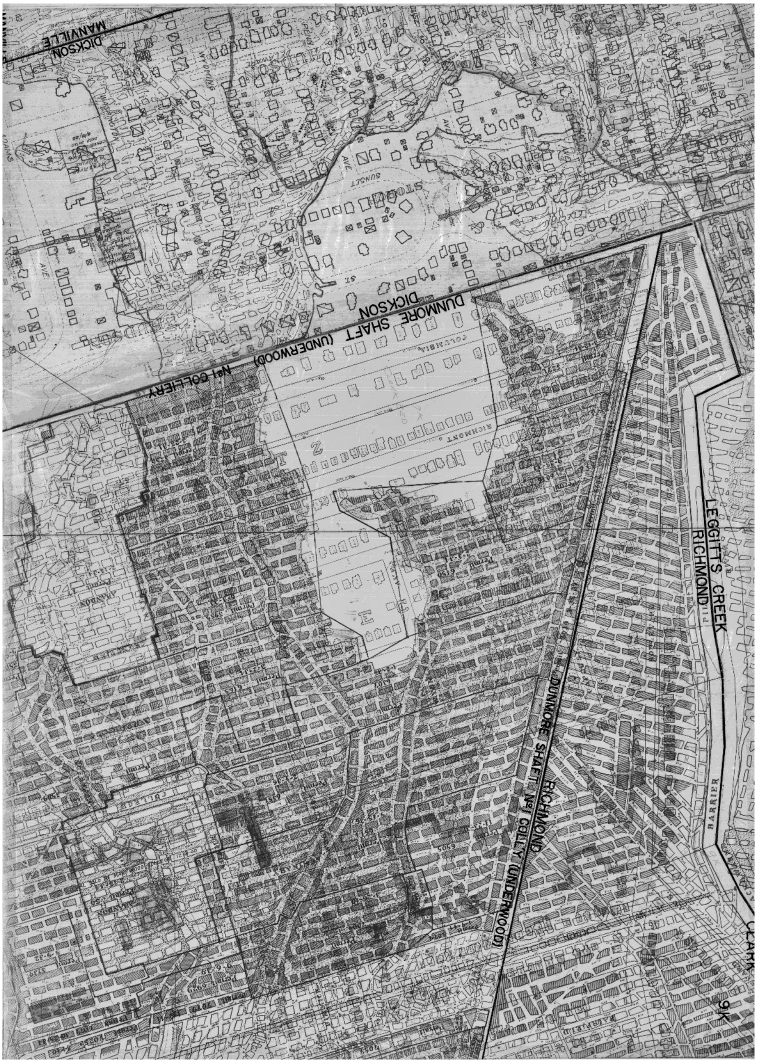
Mine subsidence, Cathedral Cemetery, Scranton, ca. 1921.
Courtesy of Lackawanna Historical Society



Rotunda dome, completed 1937, Liberal Arts Center, Marywood University.
Courtesy of Marywood University



Automated Storage and Retrieval System, Learning Commons, Marywood University, 2016. Author photo, used with permission


MANVILLE
DICKSON
SUNSET
AVE
ST.
DICKSON
DUNMORE SHAFT (UNDERWOOD)
No1 COLLIERY
COLUMBIA
RICHMONT
LEGGITTS CREEK
RICHMOND
DUNMORE SHAFT No1 COLLY (UNDERWOOD)
RICHMOND
BARRIER
CLARK
9K

Clark vein under Marywood University, undated. Marywood is located in the lower left corner. Courtesy of Bureau of Abandoned Mine Reclamation, Pennsylvania Department of Environmental Protection

With ecology at its core, the homecoming major would teach students ecological and economic boundaries, impress upon them that no costs may be externalized, and show them that a "high level of uncertainty" attends taking account of where they are. Approaching problems through an acknowledged ignorance rather than an assumed expertise, graduates would engage in a "massive salvage operation to save the vulnerable but necessary pieces of nature and culture and to keep the good and artful examples before us." To accomplish this work would be to move "society to measuring its progress by how independent of the extractive economy it has become." The ultimate lesson: homecomers would learn how unknowable their homes are; the more they stretch beyond surfaces, the more the reality of home would escape their grasp.[14]

In 2009, a homecomer addressed graduates at Northern Kentucky University. Wendell Berry called on colleges to practice "local adaptation," which means answering a "curriculum of questions" about their places. The eight questions he posed cannot be answered, he noted, by a "specialist, or by many specialists working in isolation. They *can* be asked, and eventually answered to a significant extent, by a conversation across the disciplinary boundaries." The questions: "What has happened here? What should have happened here? What is here now? What is the nature, or genius, of this place? What will nature permit us to do here without permanent damage or loss? What will nature help us to do here? What can we do to mend the damages we have done? What are the limits: Of the nature of this place? Of our intelligence and ability?" Answering these questions, which would reveal a slew of problems, would require the kinds of knowledge already taught, but it would also demand a "conversation [that] would collapse the rigidly departmented structure" of universities. The result, though, would be "a vital, wakeful society of local communities elegantly adapted to local ecosystems."[15]

Anticipating that some may excuse universities from responsibility for threats to the earth, Berry countered that "well-educated people, not illiterates, are wrecking the planet." And many of them mine specialist niches, their heads down, unaware of wider contexts. A reorientation of priorities, the homecoming major implies, for Berry and Jackson, a life of wide attention, not narrow careerism; a love of place, not abstract patriotism. Rather than pile arcane information alone, the homecomer would work with neighbors to solve local problems, which, inevitably, would trace back to interrelationships between humans and the more-than-human world, near and far. Much is at stake: Berry was certain that resource extraction will make Kentucky, his home grounds, uninhabitable in the next hundred years.[16]

Body Language

■ ■ ■

. . . left in the dead darkness

Stephen Crane, "In the Depths of a Coal Mine"

Pancoast mine (Throop)—Just after 8:00 a.m. on April 7, 1911, Jim Moran stepped away from a hoisting engine to raise coal cars from a second machine, which stood off the gangway about 1,500 feet down slope. In his absence, the first engine caught fire; whether from someone's carelessness, a blown lamp, or a motor malfunction is anyone's guess. Smelling smoke, the frantic Moran raced back to the machine shack, found it ablaze, and, shouting for help, turned a water hose on the fire. Workers stumbled forward with more hoses, but by then the engine house was roaring, the flames eating support timbers and—though no one knew—enveloping twenty mine cars in a side tunnel. Someone telephoned each vein, but only one man picked up, a worker in the China vein. Meanwhile, smoke billowed down the gangway, following air currents deep into the workings, where it drifted among pillars and faces. Warned by the call, sixteen men in the catacombs scrambled to safety, but for seventy-two others something had gone wrong, frightfully wrong.[1]

Those fighting the fire included the mine superintendent, who thought he had everything under control. Confident that all were safe, he felt sure that he and his crew could kill the flames, which may be why adjoining parts of the colliery kept working, with coal reaching the breaker for much of the morning. Around 10:00, however, someone discovered the mine cars ablaze. Only then did the boss call for outside help, and not long after local firefighters arrived above. Seeing no smoke, the volunteers expressed no panic as they dropped a hose down the shaft and descended. An augmented crew now fought the fire until it was out, at about 4:00 p.m. Meanwhile, at the head of the shaft, an anxious crowd had gathered. Where were the men from the China vein?[2]

Only Interstate 81 separates Marywood from the woods that conceal remains of the Pancoast colliery. Until a few years ago, I knew little about the fire. Almost every weekend, on the way to the farm, I'd drive by the historical marker and catch a few words, but I had never stopped to read it. I finally discovered the fire across town, in the Anthracite Museum, in a long list of accidents compiled by the US Department of Labor, which defines a disaster as an incident that kills five or more people: between 1846 and 1919, Anthracite District One witnessed eighty-one disasters. The more I read about Pancoast, the more I had to think about immigration, education, workplace safety, and workers' compensation, all issues that came to a head, one way or another, in 1911, a then record-breaking anthracite mining year.[3]

No one survived the accident to tell why the seventy-two could not escape. Despite the impossibility of piecing together a complete tale, people still needed a narrative to process the horror. Reporters somehow had to make sense of the unknown and—ultimately—unknowable events. With no eyewitnesses, the only way to write the story was to extrapolate from what did remain—the bodies. The dead told tales.

To determine whether the miners received sufficient warning to escape, rival reports offered bodies as evidence to support competing versions of events. Arguing that the men had no time to flee, the *Scranton Times* told the story of "Raitz, the old doortender, veteran of dozens of mine accidents, [who] was found at his post, dinner pail between his knees and in his hand a cup. He . . . died as he ate, from the poisonous fumes." According to the *New York Times*, recovery crews discovered bodies outfitted with tools, coats, and dinner pails, suggesting that the men had had time to collect themselves before starting up. The coroner's jury, however, in its May 8 verdict, accused company officials of fighting the fire instead of immediately warning the men, charging management with a lethal "error of judgment." Whether or not this delay occurred, the fact that the mine kept working during the inferno was a powerful symbol of company priorities.[4]

With little else to offer news-hungry readers, reporters recorded details about recovered bodies to imagine what the men's last moments must have been like. In one group of bodies, "every man crouched on his hands and knees, with his face to the ground as if endeavoring to get a breath of air." Volunteers brought the body of Isaac Dawes, the fire boss, to the surface first: "His face showed that he met a horrible death from smothering, but it was not as bad as some others which followed after. Several had bled from the mouth, nose and ears, and the congealed life fluid lay in a jelly-like mass on their lips and necks." The *Scranton Tribune-Republican* used the location of another boss's body to infer his intention: "Farthest in of all . . . Mine Foreman Walter Knight was found, lying face down. Knight had warned the men, driving them out before him, when he fell." To understand the disaster, people turned again and again not only to stories about Knight, Dawes, and disfigured bodies but also to tales about undertakers.[5]

As men brought bodies to the surface, funeral directors fought among themselves to claim the dead, behaving like "dogs that saw a bone and were eager to get at it." Asked to be on hand by 7:00 p.m., a "dozen or more" undertakers crowded a makeshift morgue, creating "much confusion and many mistakes" in official attempts to identify bodies. One funeral director even tried stealing the dead: "As soon as a body was brought to the morgue this enterprising individual laid claim to it in the name of some 'relative' whom a liberal tip had induced to assume the part."[6]

Competing newspapers also appropriated bodies. In recounting undertakers' "unseemly" and "gruesome" behavior, Scranton papers reported in opposite ways how one mother reacted to the sight of her son's body. According to the *Scranton Times*, a voice of the miners, "The grief-stricken mother of Steve Ostrosky arrived at the morgue just in time to see the body of her seventeen-year-old son carried away in one of the death wagons. The frenzied woman ran after the vehicle and with heartrending shrieks demanded the return of her dead, but the undertaker was deaf or indifferent to her pleadings." The industry-friendly *Tribune-Republican* offered another version of the same scene: "An undertaker's wagon backed up to the door and the body was placed in the basket and carried to the wagon. Mrs. Ostrosky followed. When she saw the basket placed in the wagon, she climbed to the seat and rode to the undertaker's morgue with the driver."[7]

■ ■ ■

Emphasizing our brute nature, others elsewhere told stories about bodies. As impersonal machine systems accelerated the pace of labor, a shocking—and increasing—number of people felt their bodies torn and gashed. Standardizing the movements of workers gained wide acceptance in academic and business circles following publication of Frederick Winslow Taylor's *The Principles of Scientific Management* (1911). President Theodore Roosevelt, also known popularly as Teddy Bear, urged on Americans the "strenuous life, the life of toil and effort, of labor and strife," to achieve the "goal of true national greatness." Interest in outdoor activities jumped in this era, which led, for example, to the founding in 1910 of the Boy Scouts of America. In the late nineteenth century, anthropologists claimed they could identify criminals by their physical characteristics, and "better baby contests," modeled on livestock shows, sought to uplift the immigrant urban poor. Not long later, a "eugenics craze" prompted xenophobic states to pass sterilization laws between 1907 and 1915. Literature bruited about bodies, too: H. G. Wells found a receptive audience for *The War of the Worlds* (1898), which depicts superior Martians invading England; in *The Call of the Wild* (1903), Jack London traces the dog Buck's loss of his domesticated self; and Edgar Rice Burroughs published the popular *Tarzan of the Apes* in 1912.[8]

Describing economic class divisions as tooth-and-claw battles, social Darwinism claimed that no one owed anyone anything in the struggle for survival. As this idea permeated late nineteenth-century culture, the narrative arc of *Pride and Prejudice*, *Great Expectations*, and *Huckleberry Finn* got reversed. The literary narrative of progress, the movement of a character from rags to riches, from servant to master, from child to adult, gave way to a narrative of decline. Characters now "de-evolved" from master to servant, riches to rags, human to "animal." These narratives transformed instability and randomness from trials to overcome to forces that defined human being; making this visible, the bodies of characters often bore the stigmata of a new, science-inflected narrative. Such stories reminded people that our bodies embed us within the natural world. We are animals, after all.

■ ■ ■

In Frank Norris's *McTeague* (1899), the burden of a body leads to the death of the title character. If, as Darwin pointed out, an opposable thumb and an erect gait are not unique aspects of an exceptional being but merely adaptations to the world, maybe we can set ourselves apart with our higher intelligence. Not so, Norris says.

Halfway through the novel, the state of California orders McTeague, a dim-witted dentist, to stop practicing because he doesn't have a college degree in dentistry. Without work, he degenerates from a respectable lower-middle-class urban professional to a "brute."[9] Fleeing San Francisco after murdering his wife, McTeague reverts to a hunted animal during his trek to his boyhood home, the Big Dipper gold mine, where nature is "a vast, unconquered brute of the Pliocene epoch, savage, sullen, and magnificently indifferent to man" (293). Alerted by "animal cunning" to an approaching posse, the former dentist is soon on the run again because his "brute instinct clamored for recognition and obedience" (300). In the end, however, he finds himself caught in the "vast, interminable . . . measureless leagues of Death Valley" (340).

McTeague upsets assumptions about self-control, making it a great contrast to, say, *Daisy Miller* (1878), *The Country of the Pointed Firs* (1896), and *The Awakening* (1899). Unlike characters in these texts, who enjoy at least some freedom of choice and who assert mastery over themselves, McTeague lives at the mercy of forces he doesn't understand: his heredity, the economy, the state. Visited by misfortune after misfortune, he ends up losing because the narrative gives him no chance to choose his fate; he could never imagine, as characters do in these other novels, standing up to elite American expatriates, vacationing in Maine, or swimming too deep into the Gulf of Mexico. Underscoring this, McTeague is not bright—in fact, he's "hopelessly stupid," unable to cope with, for example, buying theater tickets—and he is most alert when he responds to his animal-like sixth sense (6, 77, 300).

Influenced by the criminal anthropology of the time, which asserted that you could know outlaws just by looking at them, Norris repeatedly calls attention to McTeague's body. What the dentist lacks in brains, he makes up for in physical power. He carries "his huge shock of blond hair six feet three inches from the ground; moving his immense limbs, heavy with ropes of muscle, slowly, ponderously. His hands were enormous, red, and covered with a fell of stiff, yellow hair; they were hard as wooden mallets, strong as vises, the hands of the old-time car boy . . . His head was square-cut, angular; the jaw salient, like that of the carnivora" (7). Norris likely took this description from Cesare Lombroso's portrait of the criminal as a morally bankrupt alcoholic with a square head, big jaw, and large hands. Founder of criminal anthropology, Lombroso defined offenders as a human subspecies whose outward appearance signified inner degeneration. His theories even argued that crime, including murder, existed among animals.[10]

In the novel's final scene, McTeague and his former friend Marcus struggle with each other like animals. Battling over a bag of gold in Death Valley, they deliberately shoot their mule, which falls, bursting their last water canteen. Despite facing sure death, the rivals claw at each other for the money, tripping over the mule's body, McTeague beating Marcus with a revolver until he hears the click of handcuffs (340). The narrative leaves McTeague, chained to Marcus's dead body, "stupidly looking around him, now at the distant horizon, now at the ground, now at the half-dead canary chittering feebly in its little gilt prison" (340).

Contemporary literary critics may soon pay more attention to the degeneration narrative. Marking the sesquicentennial of Darwin's *On the Origin of Species,* Brian Boyd published in 2009 *On the Origin of Stories,* which argues that storytelling is an evolutionary adaptation, prompting the *New York Times* to proclaim evolutionary psychology the "next big thing in English." The "new" theory asserts that evolution has hardwired us with a need for fiction, which I—a nonscientist—accept, and I agree that our survival tools include the ability to intuit what others think and to determine others' motives—things literature teaches—but these folks also tout Darwinism as a way to save university English departments, which, they note, are losing budget battles to professional programs.[11] This sounds a lot like a social Darwinist claim. With no agreed-upon center, the argument goes, English faces disintegration. Unfortunately, with its legitimacy as an academic discipline under renewed attack, English has hitched itself to science, once again, to cloak itself in credibility. Marrying Darwin's theories and the study of English will likely yield interesting insights, but I can't tell whether the field's new hybrid nature is an evolutionary adaptation or a dead end.

■ ■ ■

As I ran up the front steps of the Catlin House one winter day, late for a lecture on the history of Scranton, I noticed on the porch a downed mule. A gust of wind, I thought, must have pushed the piece over, snapping its left leg, which still stood, splintered, on a concrete base. Passing the multicolored animal without breaking stride, I pulled open the storm door, wondering whether it's possible to fix fiberglass.

Long a reminder of the area's coal mining heritage, the mule was a natural choice for a regional public arts project. *Miles of Mules* put artists to work creating decorative hybrids that project organizers then auctioned off and placed all across eastern Pennsylvania. On *Uta Naka,* which is Japanese for "song within," artist Earl Lehman interlaced strips of color and lists of dead and injured miners. Lehman explained his choices: "Think of UPC, the universal symbol of commerce. Beautiful colors integrate the hidden components of gain and profit, greed and grandeur, with the buried stories of laborers, their resistance, persistence, and strength." *Uta Naka* renders the relative value of men and mules, with the latter prized most by mine owners, who could easily hire men but found it tough to find enough mules. No wonder mine managers prized the animals: strong and uncomplaining, they stayed underground, worked for food, and never went on strike.[12]

Since prehistoric times, humans have bred mares and male donkeys to make mules. Hybrids, mules are sterile, an evolutionary dead end. Sturdy and hardworking, they make great pack animals and pullers of heavy burdens, traits that served them well as anthracite mine workers. In shaft mines, underground stables housed them, so they often didn't see sunlight for days. Scranton mines employed hundreds of mules, which meant that mines trafficked not only in coal but also in hay and shit. During strikes and times of oversupply, companies put mules out to pasture. Across the street from the long-gone Pancoast colliery, Hudson Company pastured mules where Penn State–Worthington Scranton now sprawls.[13]

In a late 1890s sketch, Stephen Crane, a contemporary of Frank Norris, ties mules to war. "The Lone Charge of William B. Perkins" describes a drunken war correspondent, fresh from the Midwest, sent to Cuba to cover the Spanish-American War. After shooting a "dried palm-branch" he mistakes for a guerilla fighter, the embarrassed writer "dream[s] frantically of some anthracite hiding-place, some profound dungeon of peace where blind mules live placidly chewing the far-gathered hay." An odd metaphor to use in a war story set at Guantanamo Bay about someone living a fantasy of the strenuous life. Although the metaphor's oddity aptly describes the confusion of a man new to war, it suggests, ironically, that one can find safety in, of all places, a late nineteenth-century Pennsylvania coal mine. The metaphor recalls mules that Crane observed in Scranton in 1894. In reporting on the "endless battle between man and nature" that he had discovered underground, Crane enlists mules on both sides of this "grim, strange war."[14]

In "In the Depths of a Coal Mine," Crane seeks sympathy for miners by putting readers into the shoes of personified mules. Buried alive and confined to darkness, one mule, China, seldom sees his fellows, let alone stars and sky. Never has he known "the march of the seasons," nor has he witnessed the "white splendor of snows" or the "glories of green springs."[15] Living in lightless "dungeons," China and "his friends" would "go almost mad with fantastic joy" were they brought to the surface to experience the "full splendor of the heavens, the grass, the trees, the breezes" (207). Who wouldn't recoil at enduring a similar confinement and separation from the world above? Empathy for mules reminds readers that miners pass into this space every day.

Suggesting that mining saps one's humanity, the men Crane encounters underground are, unlike China, nameless and ghostly. Even before he drops into the pit, he describes miners getting off the elevator as "apparitions from the center of the earth" (200). The first men he meets below appear to him as the "grinning of two skulls there in the shadows . . . terrible spectres" (203). At a second mine, lounging workers "uprose with ghoul-like movements, mysterious figures robed in enormous shadows"; when some other miners laugh, it "created the most astonishing and supernatural effect" (204). Crane abandons the ghost imagery only once, when he uses an animal analogy to depict two men: "The vague illumination created all the effect of the snarling of two wolves" (204).

The mule Molly Maguire reminds readers that representation is—by its very nature—a hybrid, of experience and expression, past and present, writer and reader. Always after the fact, portrayal recalls rather than captures. When Corwin Linson, the artist accompanying Crane, tried to sketch the mule, whose name remembers rebellious Irish anthracite miners, she upsets his attempts by refusing to remain still. Molly may be "indifferent to the demands of art" (205), but her fellow workers, "intent on the artist's pencil" (205), know that Linson requires her collaboration. To immobilize her for the "portrait," several miners hold her "by her tail, her head, her legs" (205). The resulting image represents the entire scene: men and mule pose for the sketch. Nodding to the article itself as a hybrid—of image and language—the drawing also depicts Crane recording the moment in a notebook (206).

Crane reminds me that our more prosaic creations gnaw at us and the natural world. To open the essay, he personifies collieries in the Lackawanna Valley as brutish, "enormous preying monsters, eating of the sunshine, the grass, the green leaves" (195). At the Oxford mine, in West Scranton, he imagines the breaker as a "huge and hideous monster [that] sat imperturbably munching coal," its laborers continually feeding its "wide, voracious maw" (196; 200). Within the breaker, boys pick slate from coal in hopes of becoming "real miners, and go down and get 'squeezed,' or perhaps escape to a shattered old man's estate with a mere 'miner's asthma' " (198). In response to our digging, a personified earth, suffering the "deep bass rattle of a blast," flexes the "strength of a million giants" that "snuffs out ten, twenty, thirty lives. Usually she remains calm, and takes one at a time with method and precision. She need not hurry. She possesses eternity" (205). To close the piece, Crane personifies again the "mouth of the 'breaker,' imperturbably cruel and insatiate, black emblem of greed, and of the gods of this labor" (209).

The Pancoast fire suffocated seven mules. Two days after the men's bodies had been removed from the China vein, workers brought the animals to light, on the morning of April 9, Palm Sunday. When the bodies touched day, one per coal car, the waiting crowd "left the grounds." Maybe they expected human bodies. Of course, they may have reacted to the stench, or maybe the onlookers shrank from another reminder of the coal industry's assumptions about the worth of men and mules. And maybe seeing the casual treatment of the animals too easily recalled the undertakers' callous treatment of the human dead the Friday before. As if to underscore these possibilities, a news reporter records the scene with telling detail: " 'That's one of the funerals,' remarked a teamster at the colliery, coupling a team of mules to a mine car carrying another mule—dead." Pairing human and animal processions of the dead, the sentence offers an understated recognition of the ties between men and mules.[16]

■ ■ ■

Mine-safety debates buried miners. Despite lack of evidence, Pancoast managers blamed the fire on mine workers. The engine house, they noted, was only three months old, the place where the men died was a fairly new opening, and the mine itself was a model of safety. The mine owner, who admitted that he could not determine the fire's cause, pointed out, "It is more or less surmise, but . . . a boy or a man must have started it with a cigarette, pipe, [or] spark from a lamp." Months later, Pennsylvania chief mine inspector James Roderick found that the fire happened because of "the habit of throwing on the ground . . . the piece of lighted wick taken from the lamp when a new wick is placed in it." These assertions must be read in the context of larger narratives about the industry: citing Roderick's annual inspection reports, the 1911 Dillingham Immigration Commission claimed that "48 per cent of the mining casualties [were] due to the stupidity or carelessness of the victims themselves and 10 per cent [were] due to the carelessness of persons other than the victims."[17]

Things change, but not much. Some companies still pay only lip service to securing lives. On April 5, 2010, the Upper Big Branch mine in West Virginia exploded, killing twenty-nine men in the worst US mining disaster in forty years. Operators of the mine had been fined again and again for safety violations but took no corrective action. News reports later revealed that Massey Energy kept two sets of records, one for federal inspectors and one for itself.[18] At the miners' memorial service, President Barack Obama vowed, as so many presidents before him had, to make mining safer. Unfortunately, it cannot be made safe, and our addiction to fossil fuels won't let us stop digging.

Writers can bury scores of bodies. At the end of chapter 52 in *A History of Wilkes-Barre* (1930), authors Oscar Harvey and Ernest Smith use twenty deaths as their benchmark for a mine disaster; fewer deaths they deem "fatal accidents." After listing Avondale, Pancoast, and four other tragedies, they conclude, "With these exceptions . . . mine disasters have been few." Distinguishing between "fatal accidents" and mine disasters minimizes what they knew to be true: miners were daily dying or falling injured. The two make mining relatively safe because they directed *A History of Wilkes-Barre,* which contains "many biographical sketches and much genealogical material," primarily at Luzerne County business owners and political leaders, men who had a financial stake in promoting anthracite mining as a safe investment. The numbers, however, tell another story: between 1870 and 1900, 10,110 anthracite workers died in work-related accidents; between 1901 and 1930, another 14,998 died.[19]

Are the following events disasters or fatal accidents? On March 31, 1868, the rope for hoisting and lowering men into and out of the Diamond mine snapped, sending seventeen men and boys plunging 257 feet. Thirteen died. Patrick Barrett, one of the dead, a driver boss, and the man who gave the signal to descend, "was planning to quit the mine to become an undertaker." In December 1914, at the Tripp mine of the Diamond colliery, fourteen men entered a mine carriage for the descent into the shaft (the law limited the number to ten); one carried a twenty-five-pound box of dynamite, which, some claimed, exploded, blowing out the carriage floor, sending all but one man to the bottom, five hundred feet below. The sole survivor had been holding onto the carriage itself, the result of a long-held terror of elevator rides. When the crippled carriage reached the Clark vein, this man stepped off and wandered the gangway, incoherent, his wits gone.[20]

Prepared by the Pennsylvania Department of Mines, industry inspection reports annually cataloged how an anthracite miner's body could be crushed, smashed, exploded, burned, squeezed, snapped, ground, cut, ripped, gouged, impaled, contorted, tossed, and torn. In 1911, accidents killed or injured 6 percent of the 1,400 men and boys employed at the Pancoast colliery.[21] In addition to the seventy-two mine-fire casualties, a variety of mishaps killed or injured fourteen others.

January 25, John Krosnai, Polish, a doorman, age fifty-five, married: "Knee cap fractured by being caught by car that jumped the track on gangway road."

July 1, John Veigh, Hungarian, a miner, age fifty, married: "Compound fracture of leg by flying coal from blast near face of chamber."

July 13, Victor Nitupski, Polish, a miner, age thirty-eight, married: "Killed by flying coal from a blast near face of chamber in China vein."

July 18, Charles Ashman, American, a miner, age twenty-nine, married with three children: "Killed by fall of roof. He was in the act of putting the drill over a dangerous piece of roof at face of heading to pull it down, when he slipped and the roof fell upon him."

July 24, Mike Hagadish, Hungarian, a laborer, age forty-one, married with four children: “Killed by fall of roof at face of chamber while cleaning a place to restand a prop that had been discharged by a blast.”

August 3, Fred Schank, Italian, a runner, age twenty-two, single, and James Mickolovitch, Austrian, a driver, age nineteen, single: “Head, face and shoulders burned by igniting a body of gas in an old chamber in China vein.”

August 16, John Gibbons, American, a tracklayer, age thirty-six, married with three children, and Joe Kojinski, Polish, a driver, age eighteen, single: “Killed by car. While they were helping to replace a derailed car on the track at foot of slope, the engineer started the engine, pulling the car over them.”

October 28, Charley Maulchie, Russian, a miner, age thirty-six, married: “Leg and arm fractured and hip dislocated by fall of top coal at face of chamber.”

November 27, Hugh Davis, American, a timber man, age forty-eight, married: “Jaw and three ribs fractured by being squeezed between car and rib while replacing car on track.”

December 16, Mike Ouchpin, Italian, a miner, age sixty-one, married: “Ankle fractured by fall of roof at face of chamber.”

December 16, Joe Dunca, Italian, a laborer, age forty-four, married with five children: “Killed by fall of roof at face of chamber in Diamond vein.”

December 18, Joseph Hamilton, American, an engineer, age twenty-two, single: “Fatally scalded by hot water when a gate valve on engine burst. Died December 29.”

A typical list, but it treats only the surface of tragedy: names, ages, causes of death. To know something of their lives, one must turn to literature.

■ ■ ■

If you benefit from coal—and most of us do—you need to know the D. H. Lawrence short story “Odor of Chrysanthemums,” in part because it’s a good story but mostly because it makes more meaningful this list of dead and injured. Written in 1909 and first published in the *English Review* in June 1911, the story describes Elizabeth Bates waiting for her coal miner husband, Walter, to return from the pit.[22] Warmed by the coal Walter dies digging, his family eats in almost “total darkness,” about which their five-year-old son, already dressed in “a man’s clothes,” complains that he “canna see,” underscoring a central theme in the story, our shared isolation from each other and the world beyond us.[23] Elizabeth assumes that Walter is late because he’s drinking his pay at local pubs; angry, she claims that “he’ll not come now till they bring him” (1733; see 1735). After a while, fellow workers do bring him, dead, and leave his body in the parlor. While she was worrying at home, he was suffocating below. His body has no bruising; its inertness, despite its warmth, resists her attempts at connection: “Utterly inviolable he lay” (1740). The distance between them in marriage has become, she understands, final, absolute, so much so that she feels the “child within her was a weight apart from her” (1741).

The story denies the possibility of human connection. Washing Walter’s body, Elizabeth feels “the utter isolation of the human soul” (1741). She faces the “too deadly” fact that, despite “exchanging their nakedness repeatedly,” they had always been “two isolated beings” (1742). Looking at his body, she questions her identity—“Who am I?”—before admitting what she feared: “She knew she had never seen him, he had never seen her, they had met in the dark and had fought in the dark, not knowing whom they met or whom they fought” (1742). How can a reader not weep at this, the felt acknowledgment of the abyss between us? I can’t help it, even as I try to remember that the story, like all narrative, is a bridge—however temporary—tossed across the divide.

Walter, unfortunately, chooses isolation and death when he refuses to leave the mine with his friend: “Go on, Ah shanna be but a’ef minnit” (1735). Victim of a cave-in, he finds himself in a space that blunts his senses. Any lights, sounds, tastes, and smells there are imported: for example, safety lamps, conversations, sandwiches, gunpowder. In the world of a mine, the human-made supplies mind and body; after the roof fall closes off the possibility of escape, the best Walter can do, beyond hear himself think, is feel the impassive face of coal.

■ ■ ■

Ten days after the Pancoast disaster, on Easter Monday 1911, a dance in Scranton raised funds for St. Joseph’s Society for the Prevention of Cruelty to Children and Aged Persons; run by IHM sisters, the society cared mainly for “deserted orphans.” To advertise their high-society ball, which reaped more than $3,000, organizers published the evening’s dance program in the *Scranton Times*; the third dance, listed as a two-step, was the grizzly bear. Moving from a seedy West Coast saloon to a swanky Scranton ballroom, this animal dance contributed to the charity ball’s building bonds of sympathy for children that some in Scranton couldn’t quite extend to neighbors a few miles away, in Throop, where mine workers and their families gathered the same night for a benefit ball to raise funds for the 123 Pancoast widows and orphans.[24]

When people danced the grizzly bear, they threw up their arms, growled, and stepped, swaying from side to side. One of several animal dances, including the horse trot, the grizzly bear originated as early as 1910 in San Francisco Barbary Coast bars. A hybrid of person and animal, animal dances had roots in nineteenth-century African American dances or in Greek and Roman rituals.[25] Expressing our animal nature within a dance pattern must have offered some a new and safe way to display sexual freedom, which may be why the presence of the dances in elite ballrooms of early twentieth-century America shocked so many people.

In contrast to the hybrid nature of the animal dance, fin-de-siècle "high-culture" dances ennobled the human form. Isadora Duncan remade the art of dance when she abandoned ballet for a freer style that gave full play to the body. Showing her feet in an era that frowned on fleshy exposure and wearing no undergarments at a time when women wore corsets and layers of clothing, she performed in flowing costumes that recalled classical Greek and Roman togas. In dress alluding to historical high points in Western civilization, Duncan draped the human frame in an aura of refinement; her graceful moves returned to the body a dignity that Darwinism had stripped from it.

Between West Coast bars and Duncan moved the dance masters Irene and Vernon Castle; stepping from waltzes to animal dances, the couple introduced to the chic a refined bunny hug, grizzly bear, and turkey trot. Dressing up Barbary bar dances in evening wear, the Castles revealed the animal within, despite its formal cover, but they did so by moving with "restraint and decorum." Similarly, the Paris Academy of Dancing Masters hoped to soften the perceived coarseness of animal dances when it published its "Ten Commandments of Dancers," which included "dance like a civilized being and not like a savage."[26] In keeping with the academy's decalogue, public reactions to ragtime dances—and to Duncan and the Castles—were predictable: distaste morphed into bans. Although chided by some elders, young people still danced the grizzly bear at society balls, and the era's social elites still flocked to performances of the relatively scantily clad Duncan.

The Easter Monday dancers at the Throop borough building were likely eastern European immigrants. Of the seventy-two who died in the China vein, the majority were newly arrived Poles, mainly Catholic, some illiterate, and not all of them English speakers. They and their families lived within walking distance of the colliery, in Throop, Dickson City, and Priceburg, places that today the casual observer would assume to be one place. The 1910 census recorded 5,133 residents of the area. Reflecting an ethnic division that was common in 1911, the colliery manager and the mine foreman were Welsh; the "company men," English and Slavonian; most of the miners were Poles, Magyars, and

Lithuanians; the laborers, overwhelmingly Poles. The latter accounted for thirty-seven of the dead, and they made up the largest group of single men, at fifteen, suggesting their recent arrival.[27]

Widely cited among early twentieth-century historians, sociologist Peter Roberts wielded social Darwinist theories to describe southern and eastern European immigrants, whom he grouped under the term Sclav.[28] To explain murder rates among Slavs, for example, he proclaimed, “When the brute is aroused in the Sclav by a mixture of whisky and lager, he becomes more fierce than the red-toothed beast of prey” (283). Roberts especially decried weekly dances among the “working classes of these mining towns,” because immigrants at them acted like animals: “Music and dancing have ever been the great amusements of all barbaric people, and they still have a hold upon our natures” (201). Echoing later critics of animal dances, he declared that dance halls “are not fit places for our young, for their minds are not humanized and their bodies are not refined in them” (201). If Roberts was appalled by dance halls in 1904, he must have been doubly disgusted in 1911 by Scranton ballrooms, where the grizzly bear had become the rage.

Much to Roberts’s dismay, Slavs kept reproducing (82). If they would just stop breeding, he insisted, social problems in the Anthracite Region would end: “As long as the shiftless and the ignorant, the impoverished and the careless, contract marriage and are swayed by animal instinct only in sexual relation, all reforms must be futile” (82). That the resulting children were “fed, clothed and educated free of charge” blunted the “laws of nature,” he declared, which would have otherwise disposed of this “brood of the unfit” (83). Dismissing charitable “social relations,” the reformer urged that “some means should be used to eliminate this parasitic class from the social body” (83). But if the region could not rid itself of this infestation, he relented, maybe the native-born could uplift the offspring by creating for them a “wholesome environment, in which the pent-up activities of the body and the mind may find an outlet,” though not, of course, in a dance hall (202).

Similar attitudes crop up in current tensions over immigration. The chant “build the wall, build the wall,” much heard in the 2016 presidential election, recalls assumptions behind Roberts’s fear of foreigners. Within the Anthracite Region, the grandchildren of Pancoast-era immigrants have lately discouraged a new set of immigrants, Hispanics, from settling among them. In 2006 the mayor of Hazleton set off a firestorm of national debate when he urged city council to pass the Illegal Immigration Relief Act Ordinance, which was designed to stop undocumented immigrants from “overburdening local schools, hospitals and social services." The mayor claimed that illegal immigration was "driving up crime" in the city; not incidentally, the ordinance also made English the city's official language. In 2007, however, a federal judge in Scranton declared the law unconstitutional. The next year, in Shenandoah, about twenty miles from Hazleton, prosecutors charged four teenage boys with ethnic intimidation in the beating death an illegal Mexican immigrant. The *New York Times* linked the Hazleton furor and the Shenandoah killing: "Many people believe the debate fueled by Hazleton's actions helped create the environment that led to Mr. Ramirez's death."[29]

■ ■ ■

Anthracite mine workers often spoke different languages, which created uneasiness about the connection between workplace safety and English language acquisition. According to James Roderick, language barriers contributed to unsafe workplaces; he tied the large numbers of non-English-speaking workers in US coal mines to a rise in the number of fatal mine accidents. In his 1911 report about anthracite mining, for instance, he claimed that "one of the greatest elements of physical danger to the industrial workers of the United States is to be found in the inability of the many workers from Continental Europe to understand the English language." Men associated with bituminous mines agreed: "'English First' is the greatest asset to Safety First in both government and industry." In response, managers of Scranton mines posted safety signs written in half a dozen languages: English, Hungarian, Italian, Serbo-Croatian, Slovene, and Polish.[30]

Reformers believed that teaching English to immigrant miners would not only resolve workplace safety issues but would also make Americans: in these years "education for safety and education for citizenship became virtually indistinguishable." Peter Roberts, who sorted the Anthracite Region into Anglo-Saxons and Slavs, claimed that the former were the "English-speaking mine employees"; the latter were "generally called 'foreigners' and have little or no command of the English language" (20). According to his colleague Annie Maclean, coal-region immigrants "need[ed] to learn the English language. That is, in brief, they need[ed] a chance to become good Americans." Putting this theory into practice, the Delaware, Lackawanna, and Western Railroad, which controlled many Lackawanna County mines, published in 1912 *Mine Accidents and Their Prevention*, which sought to teach immigrants mine safety, "American Citizenship," and the English language.[31]

Ironically, the workplace safety movement, which “corresponded almost perfectly with a resurgence of American nativism and racism,” stood in the way of improved workplace safety. The reform-minded blamed the immigrant miner, not the workplace, for accidents, “casting the new immigrant miner in the central role—as the agent of disaster rather than its victim.” Focused on remedying defects in miners’ education and culture, the safety movement often failed to see dangers in the workplace itself.[32]

Workplaces were dangerous. Sweeping it into national debates about job safety, the Pancoast fire happened on the heels of the March 25 Triangle factory fire in New York, which killed 146 workers, mainly women, and the day before a Littleton, Alabama, coal mine explosion killed at least 128, including 125 convicts, most of them African Americans. Arguing on behalf of workers’ rights, Samuel Gompers and John Mitchell pointed to Triangle, Pancoast, and Littleton as examples of the need for unionization, improved safety, and workers’ compensation.[33]

■ ■ ■

Prior to workers’ compensation laws, an injured mine worker seeking help had to sue the company, many of which had morphed during the nineteenth century into multimillion-dollar corporations, or “legal persons.” Employer liability laws at the time demanded that the company (1) “employ suitable fellow servants,” (2) “establish and promulgate proper rules and instruct inexperienced workmen,” (3) “provide a safe place to work,” (4) “furnish safe appliances and materials,” and (5) “warn of danger.” The burden of proof, however, was with the employee. Trials determined fault for injuries, but they took time and winning didn’t guarantee quick payment or much money, especially after subtracting lawyers’ fees. Other workers often refused to testify because they feared losing their jobs, and the injured had to refute three employer defenses. The fellow-servant rule: as manager, *I* did nothing wrong, which must mean that your fellow workers were at fault. Contributory negligence: you must have done *something* wrong to get hurt. Assumption of risk: you knew this was a dangerous job but you kept working, so *why blame me*?[34]

Although workers’ compensation laws took effect in Germany in 1884 and in England in 1897, the United States did not get serious about helping injured workers until 1908, with the passage of the Federal Employees Liability Act, which abolished the fellow servant rule—and then only for federal employees.[35] A flurry of state laws followed: in 1909, Montana put workers’ compensation on the books; New York passed a law in 1910; the next year, ten states enacted legislation.

Workers' compensation laws arose, in part, as a response to problems associated with the rise of employer liability insurance, which in the 1890s had shifted the burden of paying for accidents from employers to insurance companies. As a result, employers may have grown less inclined to foster safe workplaces, and some managers may even have let slide safety measures, which in turn may have led to more accidents. With the public growing more aware of high rates of workplace injury, juries began awarding accident victims substantial amounts of money, leaving employers facing increasing uncertainty in budgeting for accidents.[36]

In the spring of 1911, arguments for workers' compensation laws reached a crescendo. The day before the Triangle fire, the New York State Supreme Court stoked passions when it struck down the state's 1910 workers' compensation law in *Ives v. South Buffalo Railway*. The court found that New York's "compulsory act was unreasonable as it forced employers to be directly liable for compensation and thus violated the due process clauses of both the state and federal constitutions." But this decision flew in the face of support that workers' compensation had been amassing from businesses, unions, and the public. Shifting "liability for workplace accidents from negligence liability to a form of shared liability," workers' compensation offered some certainty to injured workers, who were assured help, and to employers, who could now plan around a fixed cost. Although a progressive measure, passage of workers' compensation was no "revolutionary event . . . [T]he major economic interest groups with a stake in the legislation anticipated gains and were united in their political support." The first widely accepted major social insurance program in the United States, workers' compensation prepared the nation for the creation of "unemployment insurance, old-age pensions, and health insurance." Pennsylvania would not pass workers' compensation laws until 1915, despite attempts in 1911 and 1913 that were haunted by the Pancoast dead.[37]

■ ■ ■

In 1911, Easter Sunday services at the IHM motherhouse likely included prayers for the Pancoast victims and their families. Among those listening to the Resurrection story were novices who would soon take vows in a new congregation founded to serve eastern Europeans, Sisters of Saints Cyril and Methodius. In 1909, Father Matthew Jankola, an immigrant Slovak priest, had approached the IHM for help in establishing the congregation. Promptly agreeing, the IHM boasted by May 1910 that “the Slovaks have at present in our Novitiate twelve Novices; and in the Boarding school, seven young ladies [are] preparing to enter their Community.” At several parish schools, IHM sisters had long been laboring to help eastern European immigrants, the “poor and lowly”; as early as 1898, for example, they had opened in nearby Olyphant “a school for Hungarian children.” At this school, Sr. M. Stella O’Malley collected newspapers to line in wintertime the “thin coats and jackets of her little Slovak pupils”: her lessons introduced children to the Word of God as they sat wrapped in the word of the world. A response to rising body counts in local coal mines, this dual education expressed a philosophy that would soon found Marywood.[38]

SIX

On Broken Ground

■ ■ ■

another surface sacrifice to King Coal

"FOUR-YEAR-OLD"

On February 8, 1944, Marie Mitchell took her five-year-old nephew and two-year-old niece around the corner to buy food for supper. After bagging the purchases, the Pittston grocer offered Jule Ann a tangerine. Marie drew a thank-you from her niece and turned the children toward the door. Stepping into a sunny day, boy and girl skipped along the flagstone walk, Jule Ann alongside Marie, who balanced a full paper bag. A few doors down, the child paused.

"Come on, Jule Ann," her aunt said, turning to look.

The sidewalk collapsed; the child disappeared.

A bulldozer and a steam shovel arrived. As crews frantically searched, the "cave-in widened," cracking foundations in nearby homes. Soil slides and a water main break further slowed efforts. The shovel, eventually lifting more than five hundred tons of earth, dug down forty feet before a worker below looked up and "caught a glimpse of the child's red coat." In falling, Jule Ann "had been sucked into the side of the cave"; for thirty hours she lay covered with sand, a tiny hand visible. When brought to the surface, her body had "slight bruises. A faint mark . . . on her face." Official cause of death: strangulation.[1]

At first, reactions ran high. Men at the scene "rail[ed] against coal operators," and that night 250 people crowded the local YMCA to demand an inquest "*to fix the blame*." The meeting accomplished little, however, and ended with people simply deciding "to see what would happen."[2]

During World War II, Jule Ann Fulmer was not the only person in Pittston to tread on unstable ground. A month after her death, about three hundred feet from the site, a seven-year-old boy "on his way home from a barber shop suddenly dropped into the earth." Luckily, he climbed out, unharmed. In July 1942, a man fell thirty feet when his mother's garden opened; police and firemen pulled him free. In October 1943, the ground broke under a woman at work in her yard; she fell eight feet. In the same year, during an evening orchestra rehearsal, a cave-in caused the high school to "rock, crack and settle," sending fifty "panic-stricken" boys and girls scrambling to the street. Two years later, in 1945, a backyard stone wall collapsed, plunging a woman into a hole twenty-five feet deep. These episodes, not uncommon, simply marked more ways mining put people at risk.[3]

■ ■ ■

Child of sun god Apollo and Calliope—muse of heroic poetry—Orpheus excelled at song.[4] Singing, he charmed the world, so much so that trees gathered round him and rocks softened. His songs possessed the power to reshape the world, a power gods could nod at but not long abide.

Orpheus fell in love with Eurydice. At their wedding, however, bad omens attended them; the ceremony included no "hallowed words, nor joyous faces."[5] Even the torch Hymen held "kept sputtering and filled the eyes with smoke, nor would it catch fire" (6–7).

Later that day, Eurydice died of snakebite. Inconsolable, Orpheus had only song for mourning. Determined to win her back, he "dared to go down to the Stygian world" to stand before Pluto and Persephone, rulers of Hades (13–16). He sang for them, playing his lyre, beseeching them, "By these fearsome places, by this huge void and these vast and silent realms, I beg of you, unravel the fates of my Eurydice, too quickly run" (28–31). His cry, heard throughout the lower world, upset all order there: spirits wept, Ixion's wheel stopped, Sisyphus rested (41–44). Moved, Pluto allowed Eurydice to follow Orpheus to the land of the living, on one condition: that Orpheus not look back at her until she had stepped into the light of the upper world.

Crossing the threshold, Orpheus looked.

"Farewell," she said, vanishing.

With her second death, Orpheus cried again into the void, but hell refused him reentry. In the upper world, alone, he took to a high hill, one without shade, and struck his lyre, bringing trees of all description to stand over him as he sang songs of love and death.[6] His sole comfort was his memory, for which he forsook all companionship. This could not last. Ending his enthrallment of the world, “crazed women” (3) stoned him (18–19), tore him to pieces, and tossed his head and lyre into a river (50).

Orpheus’s backward glance, part love, part anxiety, part triumph, is a metaphor for writing history. Recalling a story, the singer turns, in semidarkness, to confirm the past, only to find that the story he knew has vanished. His certainty gone, he sees the doors of the past close, forcing him to return to the present, humbled.

■ ■ ■

Mining sometimes upsets surfaces. In long wall mining, more common in bituminous fields, a subsidence usually forms a trough; in room and pillar mining, which was common in the Lackawanna Valley, subsidence creates what amounts to potholes. Buildings collapse, streets buckle, and bridges tip because a mine subsidence places two types of strain on ground: tensile, which heaves surfaces, and compressive, which depresses them. Engineers speak of “maximum possible subsidence,” determined by seam thickness, and talk about predicting cave-ins using “graphical, mathematical, and computer models.”[7] Although I haven’t heard announcements that someone has forecasted a subsidence, I do trust that at any moment here the earth can open with no warning.

In 1994, a trough subsidence opened under a Scranton apartment complex; sixty to ninety feet beneath the buildings stretched the Big Bed, which near the surface was as much as fifteen feet thick. A mining engineer acknowledged that support pillars, unmined columns of coal, were “minimal” in the area. The extraction rate in the Big Bed was 60–80 percent, he claimed, with the most recent mining happening in 1942. A backfilling project in the 1970s was only “temporarily successful,” and ground in the area was “still sinking.” It still does. In 2012, as Scranton teetered on the brink of bankruptcy, workers discovered under a kitchen at the same complex a mine cave twenty-five feet deep.[8]

Both types of mine subsidence haunt not only the city but also the region. In 2003, the US Office of Surface Mining reported that crews were filling nineteen subsidences in areas from upper Lackawanna County to Schuylkill County; this spike in caves included six in Scranton and two in Dickson City. One official acknowledged that subsidence “problems are all over the place.” A decade later, a state spokeswoman noted that the Department of Environmental Protection and the Bureau of Abandoned Mine Reclamation “receive[d] at least three calls a month to look at sinkholes, ranging from tiny ones a foot deep to big ones.”

Perhaps this is one reason why in 2013 DEP rolled out a $2.5 million project to fill mine voids in Luzerne County: crews were to "pump concrete underground to stabilize a 58-acre residential area along Mill Street in Pittston," the street beneath which Jule Ann Fulmer died. The contractor discovered that some voids in the tract lay only eight feet below the surface. Paid for with fees from the modern coal industry, the project pumped underground twelve thousand cubic feet of fill.[9]

A mine subsidence reminds surface dwellers that another world haunts us. Our "here" all of a sudden becomes "there." We fall into nature, into the unconscious, into history. In falling, we realize that we have been walking on toothpicks: solid seams only seem solid. A cave-in marks a rupture in time that opens a hidden void, one we would rather not acknowledge. A dangerous memory come alive, a subsidence upends assumptions about solidity, forcing us to face a suffering earth and the suffering of the humans who burrowed through it.[10]

Life on the coal measures demands that I discover what extends beyond appearances, beneath surfaces. A gap in what I think I know, a mine subsidence, plunging me into the past, forces me to reconstruct the struggle that went on below, not so long ago. The revelation reorients me, if only momentarily, altering the upper air, placing me in deeper contexts in time and space. I learn that surface life hides histories stacked beneath me, times that have long supported what I do. The present moment may hold my attention, but the past persists, waiting, just beneath my gaze. I understand anew that when I say I'm from here, I mean more than one place: I mean a collection of places and times.

■ ■ ■

Unlike Orpheus, who looks back and sees a sure thing dissolve, the Catholic Church discovers in human history ultimate certainty: divine revelation. Defending principles that rest beyond time, the church understands itself as standing on a fixed body of truth. In the late nineteenth and early twentieth centuries, however, its solid foundations were rocked by modernism, an attempt among some clergy to "adapt Catholicism to the intellectual, moral and social needs of to-day." Responding to this threat, Pope Pius X, who served from 1903 to 1914, condemned modernism in 1907 as a movement that "embraces every heresy." To quell further disquiet, by 1910 all clergy swore, at the pope's command, an antimodernist oath. As it moved to muffle modernism, in May 1917 the church announced a code of canon law, which, among many other stipulations, prohibited Catholics from attending non-Catholic schools and colleges.[11]

The prohibition parried Progressive Era education reform, which rejected the "doctrine that certain collections of fixed, unchanging truths are to be transmitted by teachers to their students." Progressives argued that the present "age of change and uncertainty" demanded that "future citizens needed to be trained in a spirit that eschewed dogma in favor of a flexible outlook on the world." Philosopher John Dewey, for example, refused to accept that moral systems could be "absolute and unchanging," the church's belief; instead, he argued, new circumstances demanded new moral systems. When the church asserted that truth was fixed, Progressives answered that it was contextual.[12]

Although Progressive education suppressed the supernatural in favor of the natural, Catholic education rested on the "union" between them. The purpose of education, the church asserted, was not simply to make good citizens, as in the Progressive model, but to prepare them for eternal life. To accomplish this work, Catholic schools placed religion, an "essential part of education," at the "centre" of "instruction in other subjects," a curricular philosophy that Progressives rejected.[13]

A prominent defender of Catholic education, Edward A. Pace capped his PhD with a dissertation on Herbert Spencer and taught psychology at Catholic University, where he cofounded *Catholic Educational Review* and served as a founding editor of *Catholic Encyclopedia* (1911), the church's response to *Encyclopaedia Britannica*.[14] Although an advocate of many Progressive methods of teaching, Pace parted ways with Progressives who grounded moral principles in the vagaries of human experience and not in the stability of revealed truth. Only three months after the United States plunged into a world war, Pace delivered the first commencement address at Marywood, on June 20, 1917.

With war shadowing the celebration, the nine women who earned one-year or two-year degrees heard Pace ask, "What is your ideal and the purpose of your Christian education?"[15] He argued in answer that the "very essence" of education is "training in the way of upright living" (284). The "knowledge and the practice of virtue," he declared, make education "adequate equipment . . . for the service of God and the service of our fellowmen" (285). Answering Progressive philosophies, he asserted that only Catholic education "seeks to develop true citizenship, to produce men and women, and not merely thinking machines" (285).

Using the war as a touchstone, Pace defended Catholic education as the "only education that qualifies a human being to think wisely and do nobly in this crisis . . . It alone provides the mind with principles that justify our country's action, and gives a reason for the vast expenditure of treasure and blood that war demands" (286). With the conflict putting at risk "universal right—the right of each and all to life and happiness" (287), he asserted that knowing what is right rests on the "fundamental truth that the origin of right, its sanction and its obligating power, is God's creative act" (288). An education that is silent about God was not only, along "with other agencies, a prolific source of evil" but also, in the view of the presiding pope and, perhaps, Pace, one of the "causes of the war" (294). Concluding his address, Pace reminded the graduates that the world would see them in their words and deeds "not simply as exponents of a theory but as representatives of Christian education in its actual results" (294). Entrusted to guide others, the graduates, he urged, could help to teach the world the "simple but eternal truths which lie at the foundation of justice and freedom, which alone are the bond and warrant of peace" (295).

■ ■ ■

As Pace spoke, twenty-seven coal breakers dominated the twenty-six square miles of Scranton.[16] Several other breakers towered over Dunmore, Dickson City, and Throop, all within walking distance of the motherhouse where Pace spoke. Interrupting the quiet of campus, the local coal industry surrounded Marywood, above and below. To secure their place, IHM sisters put themselves at odds with Scranton's political, social, and economic elites—all men—the leaders who directed the all-male crews that tunneled under campus, work that shaped the college's physical existence.

In 1922–1924, mining affected construction of the Liberal Arts Center (LAC), the second major IHM building and the college's new home. Contractors likely consulted a 1917 blueprint that showed mines besieging the motherhouse. Set atop this labyrinth, the LAC would be open to mine subsidence, which had already threatened nearby campus grounds. Seeking safety assurances, the sisters appealed in 1922 to Pennsylvania Coal Company for surface support. In response, the company vice president declined to donate to the college any coal from under the campus, warning that it would be "unwise to construct any additional buildings under existing conditions." Although the sisters ignored him—LAC groundbreaking took place a few weeks later in August—builders shored up the LAC rotunda, just to be sure, with steel rods inside plaster columns. The rods may have held aloft the roof, but they stood on columns of anthracite that held up the floor, which itself straddled voids between coal pillars.[17]

After a survey declared the construction site safe, Pennsylvania Coal "guaranteed that for the future no mining would take place in that locality." Confident, the sisters went ahead with other expansion projects: in September 1926 a refurbished carriage house, a structure that predated the original IHM land purchase, opened as a science hall. In the same month, the congregation broke ground for what is today Regina Hall, a fire-proof home for 250 students. In 1929, however, Pennsylvania Coal betrayed its promise: a company vice president let the congregation know in March that it “intended to do further mining” underneath the campus. He reminded the sisters that his notice “is not required to be given . . . and it is given merely for the purpose of informing you and permitting you to take such steps as you may deem necessary to protect your property and persons.” Keeping an eye on the earth, sisters braced for blasts from below.[18]

Despite the tremors, the congregation got busy restoring the place. The sisters erected a statue of St. Joseph “on a knoll overlooking the grounds.” People planted shrubs and trees from Long Island and Oregon, asphalted driveways, laid out tennis courts, and built sports fields. These attempts at “beautifying of the grounds,” however, did not last. Between 1932 and 1939, St. Joseph settled “considerably,” the new roads “buckled,” and the tennis courts became unusable.[19]

Coal companies collapsed not only campus but also neighborhood grounds. In November 1936, cave-ins damaged homes south of Marywood, across College Street. Aroused residents first assembled that evening, November 8, to “war on the reckless mining policies” of the Pittston Coal Company, a Pennsylvania Coal subsidiary. Attendees formed the Green Ridge Terrace Surface Protective Association and called a larger meeting for November 12. At this gathering, which included federal and state legislators, the citizens’ group demanded that Dunmore borough prosecute a Pittston Coal Company vice president. The meeting chairman noted that Pittston Coal had “conducted ‘cross-cutting’ operations under Marywood as late as 1932 and 1933.” Indignant, people called on the state to use its police power to challenge the company belief that “because they own the coal they may mine it as they please.” Rallying the group, the president of the Property Safety Association of West Side recalled that in the early days of mining “proper support was left for the surface and no indication was given that at the final windup the supporting pillars were to be taken to New York and the miners and their dwellings left to take care of themselves as best they might.” A local labor leader pointed to cave-in “devastation” in nearby Throop as “inspiration” to the Green Ridge Terrace group.[20]

Within twenty-four hours of the November 12 meeting, subsidence tore up two Marywood homes, each occupied by a priest who taught at the institution.

Pittston Coal blamed its parent, Pennsylvania Coal, which had last mined under the spot in 1917. Although admitting that it had caused subsidence elsewhere, Pittston pointed out that its engineers were sure that the company was not at fault in this case. An engineer who conducted a mine flushing survey near Marywood claimed that it would take a half-million tons of material and $1.5 million to "make the area entirely safe." The same night witnessed mine caves in Minooka, a Scranton neighborhood, that "carried down the cellar walls of [two] houses."[21]

By 1940, Marywood stood on firmer ground. Twenty-five years after IHMs first sought surface support from Pennsylvania Coal, the company conveyed to Marywood "without monetary consideration . . . the now remaining coal in the five several veins or beds beneath the surface of lands now owned by the College." The company included with its gift maps that show the "remaining pillars and the voids about these pillars," and recommended that the "veins be solidly silted." Packing material between pillars would ensure that Marywood's "physical plant is and shall be in no danger of damage due to surface subsidence."[22] Company Christmas spirit, however, did not include offers to help with this work. Once the sisters owned the coal, of course, they assumed responsibility for mine subsidence damage.

Expanding the campus meant negotiating the underworld. Immediately after completing a flushing project in 1947, the IHMs pushed forward plans to build an auditorium and music conservatory. On March 24, the congregation asked Pennsylvania Coal to sell to it land adjacent to campus, between Washington and Adams Avenues.[23] On April 2, Pennsylvania Coal responded that it had purchased in 1924 the surface of the six lots in question for $36,000 and that it would not discuss a sale until it had determined "whether or not the coal under these lots has been fully mined out and exhausted." Should it discover that the veins had been mined, Pennsylvania Coal would "consider selling the surface with the usual waiver upon the part of the purchaser of the right to surface support."[24] The coal had not been mined.

In June, the sisters offered Pennsylvania Coal $1,000 per parcel, or $6,000.[25] Unimpressed, the company replied more than a month later, telling the congregation that it could not "part with title to them. There is considerable unmined coal underlying the lots."[26] The sisters responded within three days, telling the company of their disappointment and asking for an option on the property "when the coal has been mined." The congregation appealed to the company's better angel: "For nearly a half century our Sisters have been struggling, practically alone, to transform what was a wilderness into what we have to-day. Not for our individual selves, but for the general good of the public who may wish to take advantage of the educational advantages we may have to offer."[27] The company's answer was still no. After eventually purchasing the lots, the sisters broke ground with no assurances of surface support.

Not long after this exchange, the IHMs symbolically acknowledged that mining and Marywood shared a common history. Introducing a new college seal in 1949, the sisters rewrote the previous seal, which was, essentially, the congregation's seal, in which a double ring enclosed a disembodied Immaculate Heart of Mary. The redesigned seal displaced the supernatural with the natural: the Immaculate Heart gave ground to a green field and a diamond of coal. But the otherworldly didn't simply disappear; its representations grew in number to occupy space above and below the line that separates green and black: in the golden immaculate heart above and in the alpha and omega written in the open book below. The supernatural found itself not disembodied from but embedded throughout the natural.

Since then, this seal has not only distinguished Marywood from the congregation but has also wedded the school to the Anthracite Region.[28] Appearing at a moment in local history when coal mining fell into a free-fall decline from which it never recovered, the seal memorialized the institution's relationship with an industry fatally undermined by a changing global economy. In an unsettled time, Marywood publicly reaffirmed its commitment to the region just as the region began to feel, for the second time in three decades, the sting of deindustrialization, a pain relieved only by the agony of world war. In response, the region entrusted to the school an ever-growing number of its daughters.

■ ■ ■

As she vanishes, Eurydice fades from stories about Orpheus. What was her view, from below, as she slipped back into Hades? Reimagining this moment, which resurrects the twice dead, "Eurydice" (1916), by poet H.D., offers an answer.

Eurydice reacts with anger and defiance. In maintaining her dignity, she acknowledges that she has lost again what she glimpses just as Orpheus turns—a world of flowers (III 5). A memory won and lost, she has not, however, abandoned herself. She refuses disorientation. Unlike the myth, in which she functions as a placeholder, the poem portrays her as complex and alive.

"Eurydice" begins, "So you have swept me back," which suggests that she is unsurprised that Orpheus looked.[29] The word "so" opens the next two stanzas, each beginning with the same line: "So for your arrogance," which is also the first line of part V. The word “arrogance,” repeated in the poem four times, reveals her insight about her singer-husband (I 6; I 11; V 1; V 12).

When Eurydice asks, “Why did you glance back” (II 9), she already knows the answer: it was not for her that he turned. He looked to know that she was there, to see her step forth from the dead, the ultimate proof of his power. Accusing him of “ruthlessness” (I 7), she knows that he did not accept her renewal as a gift of the gods. In assuming that he alone could accomplish this unnatural act, he kills her.

Eurydice sees it in his face. He glimpses in hers only his “own face, / the fire of [his] own presence” (II 18–19). Had he empathy, had his song in the underworld been about her, he would have seen in her eyes what she sees, “all, all the flowers” (III 5). But charming her back to life was only about him proving that he could woo even the gods of hell.

The gods tested his presumptuousness as well as his patience. They knew that he could not leave this line uncrossed. His glance defied them.

Eurydice lost touch with a living earth, represented by flowers. Colorful, transient, sweet smelling, the flowers that she sees “bent / over the sharp edge of earth” (I 2–3) hang in stark contrast to the darkness, fixity, and sulfurous smell of the underworld, where “dead lichens drip / dead cinders upon moss of ash” (I 9–10). If only she had the chance to smell the flowers, a memory of the upper world, she “could have dared the loss” (IV 22).

As the poem concludes, she claims her dignity, telling Orpheus that “against the black / I have more fervor / than you in all the splendor of that place, / against the blackness / and the stark grey / I have more light!” (VI 1–6). In losing all again, she can fall back on only herself: “At least I have the flowers of myself / and my thoughts—no god / can take that!” (VII 1–3). She declares that she is not powerless in the underworld: “And my spirit with its loss / knows this: / though small against the black, / small against the formless rocks, / hell must break before I am lost” (VII 6–10).

■ ■ ■

Near and far, mine subsidences killed people. In 1869, members of two families died when a subsidence swallowed their Hazleton-area homes. In Alberta, Canada, in 1903, a cave-in triggered a landslide that buried 70. A subsidence in Japan in 1915 caused a flood that drowned 237. In 1916, land falls in Dunmore opened only a block away from a subsidence that had “several years ago” caused a gas explosion that had killed 7. In January 1925, a mine cave cut a gas line in West Scranton, snuffing out a family of 6.[30]

Although these subsidences killed many, surface dwellers usually died in cave-ins in the same numbers that roof falls killed miners: one by one. A seven-year-old Forest City boy drowned in April 1910 after falling into a cave hole. In August 1919, an eleven-year-old boy playing soldier in a vacant field disappeared "into the surface workings of the Diamond mine of the Glen Alden Coal company." Public feeling ran so high that the Glen Alden general manager stood trial for manslaughter. In 1927, a land fall in West Scranton dislodged a "slab of concrete" that crushed a four-year-old boy playing in his yard; a newspaper described the child as "another surface sacrifice to King Coal." In 1935, a mine subsidence pulled under an unemployed miner out picking coal; he left behind a wife and seven children. In Scranton, a 1982 mine-cave killed a heavy equipment operator who was at work filling an "abandoned mine shaft."[31]

Cave-ins threatened whole towns. In 1879, mine subsidence put at risk the Kohinnor colliery village in Shenandoah. In 1911, two acres of Clarksville collapsed into a Delaware and Hudson Company mine. In 1917, the Schuylkill County village of Maizeville had to be evacuated because of mining beneath it. In 1940, a mine cave in Shenandoah left two thousand homeless; the estimated damage was a million dollars.[32]

Chance distributed the danger unevenly. Some places within Scranton, for example, were less safe than others. One night in June 1913, parts of Pittston Avenue in South Side fell six feet; sidewalks stood on edge and wrought-iron fences lay twisted. In November 1937, the same neighborhood coped with damage to five homes whose floors dropped eighteen inches; two were made "uninhabitable," despite "standing on props" that had been placed under them after a prior settling. Not many blocks away, in July 1938 subsidence of the "old National mine" ripped out basements in five more homes, destroying one and seriously damaging the rest. All five had suffered subsidence damage in the past; the home made unlivable had just been repaired. Moffat Coal Company, which leased the National mine, agreed to "prop up the damaged homes until such time as permanent repairs are made."[33]

Nothing and nowhere were safe. Near Pittston, at Yatesville, in July 1909, a Wilkes-Barre and Easton train plunged into a subsidence hole, killing two trainmen. In April 1911, a horse dropped through a main street in Forest City; a burst water main drowned the animal before it could be saved. A subsidence in February 1913, just off Mulberry Street in Scranton, cracked an ice cream factory and swallowed a Salvation Army wagon loaded with "old books." A Scranton cave-in in January 1914 ruptured a gas line, sparking an explosion that burned the Washburn Street Presbyterian Church. In 1926, in Wilkes-Barre, thirty thousand feet of lumber tumbled into an abyss. In 1943, a cow in Larksville disappeared into the earth; although she was rescued, her owner sold her after his barn fell into a second mine cave. A Girardville land fall in 1944 buried an "automobile 'graveyard.'"[34]

Living with cave-ins meant patching places. Subsidences broke up homes, singly or by the handful, upsetting domestic life. Often enough, a land fall dropped only the basement, but this usually sent back underground the family supply of heat. Cave-ins frequently ruptured pipes, disrupted drainage, cracked foundations, blocked sewer lines, and knocked doors askew. My city block saw mine subsidence in August 1935 when mine caves that ruptured gas lines killed shade trees.[35]

Subsidence troubled one Taylor resident enough that he received in 1930 a US patent for a "'safety mine cave settlement construction device,' to protect homes in mine cave regions." The patent covers construction design of a house with a "cellar or basement, in which the cellar floor is suspended from the girders or sills of the house, so that the cellar floor will be held against movement in case the ground underneath the floor gives way."[36] This sounds like a castle in air.

Companies could legally remove coal that supported the surface, a practice called pillar robbing. Purchasing pillars may have bought people peace of mind, but it guaranteed nothing. Mining unseen, companies robbed—really robbed—pillars. In 1916, for example, surface settling left a Dunmore home "twisted and torn," despite the owner having "some time ago" bought the underlying coal. In 1919, Scranton Coal Company removed city-owned coal from beneath the Scranton Public Library. Although Ashley Borough had paid Glen Alden Company for the coal under its bypass, in 1944 the road dropped eight feet across its forty-foot width, almost trapping two moving vehicles.[37]

Mine caves disturbed the dead. In 1921, every Pennsylvania legislator received a packet of photographs that depicted mine caves in Scranton; among them a photo of the open coffin of a "well known Scranton, Pa., woman, whose grave was torn open . . . in Cathedral Cemetery, where hundreds of bodies have been dropped into the mine beneath." That caves-ins pulled hundreds of bodies into mines may have been exaggeration, but sixteen years later—and twenty-six years after the Pancoast disaster—the same thing happened in a Throop cemetery. Fearing "outbreak of a serious epidemic," borough officials ordered the company, which mined the "old workings of the Price-Pancoast Company," to cease operations. Never before had a Lackawanna Valley town halted mining operations for public health reasons.[38]

* * *

In February 1896, miners at Twin Shaft, near Pittston, struck a fissure in the roof of the Red Ash vein; the six-inch opening spilled “considerable water and soft coal.” To test the stability of what lay above, crews drilled from the surface a borehole that cut through 146 feet of sand and 257 feet of rock, a sufficient cover to resume operations. In late March, an inspector detected no issues at the spot, nor again in April when he reported that “everything was quiet,” despite evidence further on of a “bad roof in some of the chambers.”[39]

In June, workers heard “constant cracking and splintering,” eerie sounds that meant moving mine pillars. To stabilize the roof, company officials ordered down just before midnight on Saturday, June 27, “as many men as possible” to prop gangways and workplaces.[40] Soon, thirty others, including the mine boss and the superintendent, joined about thirty timber men already feverishly at work deep in the mine, nearly three thousand feet from the shaft and more than four hundred feet underground.[41]

At 3:00 a.m., tremors tumbled Pittston people from their beds.[42]

Rescuers confronted recurrent crushes. As men secured the roof at the bottom of the shaft, pillars collapsed within fifty feet of them. In their efforts to clear roof falls and prop gangways, they discovered that despite building cog pillars—stacks of timber and rock—the roof fell. Driven back again and again, the men realized by afternoon that finding anyone alive would be impossible.[43]

Recovery work began. Tunneling to the bodies through an unstable mine meant using no explosives, so the team moved forward with painstaking slowness. Loosening rock by hand, the crew piled carloads of stone for roof support; working day and night until July 29, they advanced only 553 feet. With timbers cracking and the roof splintering, the men stopped. The fifty-eight would stay where they died.[44]

If a working mine makes noises, why didn’t the fifty-eight get out? According to initial reports, in moments prior to the squeeze the mine made no sound. Men who left the shaft at the time claimed that “they did not hear any pillars crushing, any unusual sounds coming from the roof, or any indications of a cave.” Perhaps because of the quiet, the superintendent and the mine boss may have mistaken the location of the cave-in they meant to forestall. Rather than attending to visible signs of a squeeze at the fissure, they took the timber crew farther on, to a spot near the mine pump.[45]

Subsequent investigation, however, told a slightly different story. Inspectors determined that the mine superintendent had disregarded the “customary practice of shoring up from the stabilized areas and gradually moving toward the unstable sections"; making a "fatal error," he "went directly to the middle of the weakest part of the mine roof with his men and attempted to prop it and stabilize it."[46] He died trying to right a shifting place in an uncertain world. Blaming a dead man, however, did not excuse the underlying cause: the company practiced pillar robbing.[47]

On the surface, two hundred acres settled.[48] Unlike at Twin Shaft, cave-ins that killed miners usually did little damage above ground, which retained its aura of safety. Only when cave-ins sliced open surfaces did nonminers feel their sense of security stripped.

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To reach safety, the pilgrim Dante goes deeper, despite dealing with ever more horrific sites in his journey to the heart of hell. Only after he reaches rock bottom can he begin his trek upward, toward the heavens. In canto XII, he and the poet Virgil, his guide, descend with difficulty into the "broken chasm" that punishes those who have done violence to others.[49]

This circle depicts nature upset. The pair happen first upon the Minotaur—half bull, half human—who guards this circle and who briefly stops them, biting himself "as one whom anger racks within" (15). Frightened, Dante "staggers here and there" before Virgil urges him to resume the descent (24).

As they climb down, the Roman poet recalls the earthquake that "trembled" hell with such force that he "thought the Universe / Was thrilled with love" (41–42). The quake, announcing Christ, who had come to hell to lift to paradise "virtuous pagans and the patriarchs," tore up the underworld, destroying parts of it, reminding all of the power of the almighty (216n5).

Below the travelers, a "river of blood" boils the souls of the violent (47), who are kept standing in the burning stream by a band of centaurs—half human, half horse—who shoot with arrows those who rise too far above the surface (117). The bubbling blood, Dante sees, symbolizes the "wrath insane, / That spurs us onward so in our short life" (49–50).

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The failure of coal pillars under Scranton coincided with two other subplots of the extraction narrative: pillar robbing and subcontracting. Mine subsidence had always been a problem in the city, but cave-ins spiked as engineers learned to rob pillars, a legitimate and legal practice to remine worked-out veins. During first mining, companies took roughly two-thirds of the coal, leaving the other third in pillars that supported the surface. By the mid-1890s, miners could remove pillars from an old mine as they retreated back to the shaft, dropping along the way tunnel roofs and some surfaces. Later, engineers perfected pillar robbing: in third mining, crews removed every surface support, taking every pound of coal possible. Add to this that early on no one thought to place pillars one atop the other. The result: surface collapse. By the late 1910s, pillar robbing was a major source of anthracite for subcontractors, who were mining an increasing percentage of coal.[50]

Mainline companies—Pennsylvania Coal was one—used subcontracting to maximize profits. Operators would lease a vein to a miner, who would hire others to work it. Company breakers would process, ship, and sell the coal. Such agreements encouraged pillar robbing; pressed to pay overlords, subcontractors upped production by cutting corners and tightening oversight of employees, who had to work harder, faster, and longer to survive.[51]

Subcontracting also allowed large companies to bury responsibility for surface damage. People understood long-established companies as too "sound and conservative" in their mining practices to allow surface subsidence. Instead, folks blamed "irresponsible mining" solely on the "small coal operator"; few assigned responsibility for cave-ins to the lessor company in lease agreements. Big and small companies blamed, predictably, each other.[52]

In early twentieth-century debates about mine subsidence in Scranton, coal companies spun a tale of solidity, arguing that the anthracite industry, the economic pillar of the community, created jobs, attracted other businesses, and legally mined without liability for surface damage. Coal operators asserted that continued mining would solve mine subsidence problems because company crews repaired surfaces and took "precautionary measures" to prevent collapses.[53] Companies painted surface protective supporters as radicals who exaggerated subsidence dangers.

Surface protective associations spun a tale of devastation, arguing that irresponsible mining threatened to destroy the city. They urged local and state governments to use their police powers to secure the physical safety of the individual person and his property, and accused companies of greed. When companies pointed to property deeds that exempted them from liability, protective associations pointed out that public safety trumped "cut-throat waivers" in contracts that were first written, they noted, prior to the possibility of widespread caving.[54]

Pennsylvania attempted to ease subsidence worries. The first state law to control subsidence passed in March 1911. Two years later, the Davis Act protected public highways from cave-ins, empowered local "bureaus of mine inspection" to demand from coal companies maps of underground workings, and formed in Scranton the Bureau of Surface Support. Although in 1915 debates about mine-cave relief flared again in the legislature and the Pennsylvania Supreme Court, the state may not have been all that interested. By then, anthracite was a dwindling percentage of state coal production, and most mine subsidence damage happened, it seemed, in Scranton. Passing legislation to help one city at the expense of coal buyers and state taxpayers was a tough sell in a largely rural state. Besides, the handful of folks who suffered damage had signed away all rights to surface support.[55]

Despite lawsuits and legislation, companies mined with impunity. And when they weren't merely indifferent, they reacted with hostility to community protests against mine subsidence. In 1917, engineers and coal company officials summed up industry views when they told the *Philadelphia Press* that "this is a mining region and the sole use of it to us and the State is to dig the coal out of it, no matter what becomes of the surface."[56] In the 1940s, at a public meeting in Ashley, the general manager of Glen Alden Company, a big and well-run outfit, showed his irritation at incessant questioning about subsidence when he wondered aloud why Ashley residents "didn't move up into the mountains."[57]

Mine operators hid potential problems. After clearing away all signs of a cave-in, they would sometimes fake "absolute ignorance" of it. Other times, they flooded dangerous mines before inspectors arrived, only to pump them dry to resume mining after inspectors left. In some cases, subsidence may have been deliberate, rather than accidental: a few engineers "encouraged mining even though subsidence was imminent, on the grounds that remedying the surface was cheaper than allowing valuable minerals to remain in the ground."[58]

The extraction narrative relies not only on the appearance of solid surfaces but also on silence about subsidence. Intended to bury a nettlesome issue, the silence makes it tough to recover the full story of the place. In conducting research for his book *Regulatory Takings* (1995), William A. Fischel found little information in Scranton about mine subsidence. At the Anthracite Museum, he discovered nothing beyond a few technical pamphlets and post-1950 news clippings. A prominent historian of the anthracite industry told him that mine subsidence was simply never a major issue.[59]

But if mine subsidence had never been a major issue, why did prominent Scrantonians form and sustain surface protective associations? Why did Scranton city government have an active Bureau of Surface Support? Why did the Scranton school board and the Scranton Board of Trade have standing mine-cave committees? Why did the state Democratic Party insert in its 1912 platform a surface support plank? Why did the state legislature pass in 1921 two acts designed to return to homeowners the right to surface support?[60]

Silence about subsidence may have been the rule because, despite insults, damage, and deaths, people accepted it as a fact of life. Shouldering the "tragedies philosophically," many understood subsidence as part of mining, rather than a fault of mining. For example, after a forty-foot-deep subsidence damaged his home, a Pittston miner told a reporter in 1943, "Mine work is always dangerous. We must expect things like this." Apparently, as the reporter noted, "cave-ins were all part of the hazard of living and earning a living in this area."[61]

Held in the iron grip of railroad interests headquartered in New York, early twentieth-century mine workers had to choose between unemployment and a damaged house. Usually, the worker chose to keep working, which meant silence about subsidence; the choice, however, placed him "in a fight against his own scruples and interests."[62] But who could blame him? To have work meant giving up solid ground. And the work he relied on made the ground ever more unstable. His workspace destabilized living spaces: choosing to live with subsidence, the mine worker undid his own home.

■ ■ ■

The best literature expresses the complexity of lived experience; some of the rest obscures not only complexity but also erases experience. A 1928 history of Lackawanna County republished "The Vale of Lackawanna," a poem that first appeared in the *Scranton Republican*.[63] Commemorating the county's fiftieth anniversary, the five-stanza poem recounts in its first three sections the land's geological history, its Native American presence, and early Euro-American settlement. The piece reduces nineteenth-century history to a couplet in the second half of stanza 4: "They dug the iron and coal from nature's side / And scattered wealth and power far and wide" (29–30). The pronoun has no antecedent; the verbs veil violence; the direct objects mask the labor that connects them all.

Poetry is not history, but editing out all environmental damage, labor struggles, and mass immigration makes the poem's omissions obvious to those who witnessed them. That the piece rewrites local history so completely would appeal only to county elites who would rather not see that they had profited from what the poem ignores. For these people, the "golden jubilee" crowns the region's narrative of extraction (40). Not surprisingly, iron and coal men founded the Lackawanna Historical Society in 1886 as the Lackawanna Institute of History and Science to collect and preserve a more important history, one without people: “the fossil flora of the coal measures” (20).

It would be easy to dismiss this vision of history as naïvely celebratory if the same publication did not include the poem “The Roaring Brook,” which similarly erases the past (19). Although this poem also dwells on Native Americans, it cuts any allusion to the nineteenth-century iron furnaces, coal mines, and dams that reshaped the stream; the poem restores Roaring Brook to its most pristine condition, before iron making in the 1840s gave birth to Scranton. With nothing else to go on, the reader might think that Roaring Brook in 1928 was a scene only of “flowers wild along the vale, / And birds in bowers nigh” (33–34). But in 1928 little along the brook’s banks could “please the ear and eye” (36): train whistles, coal breakers, and factory horns drowned bird calls; acid mine drainage fouled water; and dams interrupted the “purling stream” (9).

The poems, which bookend the chapter “A Story of Lackawanna County,” complement the narrative of extraction developed in the chapter’s prose, which describes Scranton rising from “a mere hamlet in 1800 . . . [to] a cosmopolitan city . . . to a capital of the anthracite world” (18). The pamphlet urges residents of city and county to “feel justly proud . . . [H]ere and there beautiful homes and estates, all attest progress and prosperity” (18). This enthusiasm mentions, however, no collieries, culm banks, or coal breakers, the economic emblems of Scranton’s growth. In his preface, S. Fletcher Weyburn asserts that he writes local history with an eye to “important events and incidents that appear to [him] worth remembering,” which include mainly the “struggles of the leaders in the early days to found the city and county,” whose origins depended on these leaders’ “substantial values” (5). Weyburn’s story of “stable values” is, as he points out, “a” story of Lackawanna County (5). It’s not the only story, of course, or even the main story. It is, however, a story solely for local elites.

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Who should pay for breaking surfaces? Home and business owners who signed away their mineral rights? Coal companies that left no surface support? People who burned anthracite? State taxpayers, who benefited from lower energy prices? Answers depended on a related question: Who was liable? Depending on who responded, replies to this question pointed to written contracts or to moral obligations.

Companies may not have stolen subsurface rights, but workers had to give them up. Railroad and coal corporations first owned much of the land where

Scranton developed. When they sold surface rights, they not only kept subsurface rights but also exempted themselves from responsibility for surface damage.[64] Luckily for companies, Lackawanna Valley geography demanded that mine workers live above mines, because living off the measures would have meant an impractical and far too costly commute.[65] The first purchaser of a lot bound all subsequent purchasers to the same terms: surface ownership only and company exemption of liability for mine subsidence damage. Homeowners across the region today know the cutthroat waiver from their property deeds. Pennsylvania law, which affirmed the separation of surface and subsurface rights, made subsidence damage perfectly legal.

The 1880 Pennsylvania Supreme Court case *Scranton v. Phillips* upheld the validity of the cutthroat waiver.[66] In May 1860, Joseph Fellows sold a 50' × 150' lot to Emily Preston, who acquired only surface rights (425). The deed expressly exempted Fellows from responsibility for surface damage due to mining (425). In July 1860, Fellows leased his subsurface rights, a move that the court defined as "virtually a sale of all the coal," to city founders George and Selden Scranton (429). The lease stipulated that the Scrantons were to leave sufficient support for the surface of the Preston property, which, in early 1861, she transferred to the trustees of the Calvinistic Methodist Church, who paid to Fellows in April 1867 the last of the balance that Preston owed him (427). The second deed included no exemption from responsibility for surface support (429). In 1861, the trustees built on the lot a church, which, in the fall of 1867, a mine subsidence damaged (426). The trustees sued the Scrantons and Fellows, basing their claims on the terms of the lease and the lack of an exemption in their deed with Preston. The court ruled not only that the first deed trumped the second one but also that Fellows intended in the lease that the Scrantons have all rights to the coal, including his exemption from responsibility for surface support (429).

Prolonged conflict about mine subsidence erupted in Scranton just before and after 1917, the year the industry hit peak production. The spark was the 1909 caving of No. 16, a public school in West Side. Although it denied responsibility, Peoples Coal Company had last mined beneath the property.[67] Lasting ten minutes, the subsidence also knocked houses off foundations and snapped "water, gas and sewer pipes," making "living next to impossible in the affected district."[68] Enraged residents lobbied Harrisburg to force coal companies to pay for property damage. Coal operators responded that the caving was an isolated incident caused by a rogue company. Surface protective people, who saw the cave-in as one example of an ongoing threat, demanded legal action.

In 1917, *Penman v. Jones* (February 12) added another wrinkle to the wrangle over mine subsidence, validating a third property right, one in addition to surface and mineral rights: the right to support or cave the surface. In 1873, William Matthews bought land from Lackawanna Iron and Coal Company; the deed included a cutthroat clause.[69] In 1891, Lackawanna Iron and Coal Company sold to Lackawanna Iron and Steel Company the mineral rights under a swath of land that included the Matthews lot (1044). Six years later, in 1897, the former company sold to Lackawanna Iron and Steel all its anthracite in Lackawanna County, which included coal under much of downtown Scranton (1044). Neither transfer contained a cutthroat waiver, which meant, a Scranton attorney argued, that Lackawanna Iron and Coal had decided to retain its right of support, which, he declared, was a third estate right (1044). In May 1915, Lackawanna Iron and Coal transferred its right of surface support to the Scranton Trust Company, which sold this right to T. F. Penman, the then-owner of the Matthews lot, who had contracted to sell the property to John Jones (1044). Jones backed out of the deal, however, because he thought that Penman possessed no right of surface support (1043). In determining that Penman had, in fact, a right to surface support, the state supreme court concluded that separating surface and subsurface rights makes real the existence of a third right, the right to support or destroy surfaces. To avoid further legal trouble, four months after *Penman v. Jones* and only a few days after Reverend Pace offered his graduation address at Marywood, coal companies in Scranton announced that they would repair subsidence damage up to $5,000.[70]

Penman v. Jones undid the cutthroat waiver for many landowners in downtown Scranton, but it did nothing for others, including, much later, me. In fact, the ruling may have made it more difficult to undo the waiver elsewhere because it confirmed the existence of the right that so many had waived in signing deeds with coal companies.[71] The brainchild of the third estate, Philip Mattes, learned this when the US Supreme Court announced its decision in *Pennsylvania Coal Company v. Mahon*. Their arguments strengthened, big companies continued leasing coal veins and collieries to small operators, who did what they could to evade responsibility.

Fallout from the caving of No. 16 School led to *Pennsylvania Coal Company v. Mahon*. Scranton activists convinced state legislators in 1921 to pass the Kohler and Fowler Acts. Kohler prohibited companies from mining in ways that would endanger public buildings; Fowler taxed coal production to repair subsidence damage. If a company wanted to avoid the tax, it had to assent to the Kohler Act. In effect, the acts circumvented the cutthroat waiver. Surface owners in Scranton, including IHM sisters, who, remember, had tried unsuccessfully to broker a deal with Pennsylvania Coal, hoped that this would end the "mine cave evil." It didn't.[72]

Pennsylvania Coal immediately challenged the acts, and the case moved quickly to the US Supreme Court, which rendered a decision on December 11, 1922, not four months after IHMs broke ground for the Liberal Arts Center.[73] In *Pennsylvania Coal Company v. Mahon*, the court ruled that Kohler amounted to an unlawful taking of property.[74] Overturning acts designed to force companies to leave some of their property—coal—where it was so that it could support surface life, *Mahon* gave a green light to companies to take all they could get, no matter what happened to the world above. Companies did, and then some, because the ruling torpedoed legal challenges to their claims that they bore no legal—or moral—responsibility to repair surface damage.[75]

■ ■ ■

In Plato's *Republic*, Socrates describes education, one's progress from ignorance toward grasping ultimate reality, as a struggle to leave the confines of a "subterranean cavern."[76] Raised inside a cave and forced to look in one direction, people in this allegory initially see only shadows that a fire behind them casts on a wall. The teacher wrenches each student around to see that what he took to be reality was, in fact, insubstantial, "shadows of the artificial objects" (515c). To pull the student beyond this realization, great though it is, the guide must "drag" him from the cave, into the light of a wider world, where he eventually looks upon the sun and understands it as the source of "seasons and the courses of the year . . . and is in some sort the cause of all these things" (515e, 516b-c).

Our republic has a cave problem. We refuse to turn around to see the damage that our energy consumption creates, so surfaces keep cracking, despite our best Band-Aid efforts to keep an even keel. Blinded by our own light, we stumble upon holes of our own making, which recall to us the darkness of caverns we thought we'd left behind. Our present interrupted, we remember, too briefly, the depths of our ignorance, which we carried with us below. The grounds of our knowing, we suspect, are unstable: we have built what we see on cutthroat terms, not only here, in Pennsylvania, but also anywhere we mine coal, pump oil, or drill for natural gas.

■ ■ ■

Extraction and subsidence narratives shaped in Scranton a double consciousness. Boosters called the city the "anthracite coal mining capital of the world," a bumper-sticker version of the narrative of extraction, but they were also sensitive to how others viewed its mine subsidence problem.[77] For example, in the aftermath of the No. 16 School caving, the president of the Scranton Board of Trade lamented that public perceptions of mine subsidence made it "almost impossible to get new industries here." After an investigation of underground conditions, the Scranton Mine Cave Bureau reported in 1913 that the "mine cave danger has been advertised to Scranton's discredit, that it is a bugaboo, and an injury to the city." In 1919, however, the Scranton Typographical Union was so concerned that the "mine-cave question" had been "an eyesore to Scranton for many years" that it "elected delegates to attend the meetings of the Scranton Surface Protective Association."[78]

For city boosters, mine subsidence was a public relations nightmare. A 1913 article in *Technical World Magazine* proclaimed that Scranton perched above a "vast hole" that the "city is likely at almost any time to settle into." Using this article as an example of people's "radically wrong impression" of mine subsidence, Frederick Hitchcock argues at length in his 1914 *History of Scranton* that the city does not straddle a "vast yawning sepulchral void" that is about to swallow Scranton's "inhabitants and appurtenances, including its politicians and suffragettes." Ironically, a 1912 report about the city's underground conditions, which the city and the school board had ordered after the No. 16 caving, may have contributed to prophecies of the city's collapse. The report noted that coal companies had removed from beneath Scranton more material than was excavated during construction of the Panama Canal.[79]

Just as companies separated surface and subsurface property rights, surface protective associations separated surface and subsurface safety, a fact implied in their very names. For example, letterhead for the Scranton Surface Protective Association, dated June 10, 1927, included the motto "Make Scranton Safe," a misnomer, given the number of injuries inflicted daily on underground miners.[80] Summing up the group's mission, the motto assumes that safety is an above-ground issue. Ending subsidence was never about ending mining; it was about ending reckless mining that damaged surfaces. For advocates of surface safety, underground safety concerned miners, whose work many surface dwellers never knew.[81]

As ground broke under Scranton in the 1920s and '30s, markets dissolved under coal companies, threatening economic life in the city, especially after the onset of the Great Depression. Efforts in the 1930s to promote coal mining to the community that relied on it suggest widespread fear of the industry's erosion. For example, stepping off during the industry stumble, "Anthracite on Parade" capped Anthracite Week, an October 1937 celebration that hoped to reenergize anthracite markets. The Monarch Anthracite Company float reminded paradegoers of the power of coal; the exhibit "carried a throne on which was seated, Anthracite, the King of Black Diamonds, dressed in white robes with pages . . . and maids mounted on displays of coal." Rolling along with five thousand marching mineworkers, a Penn Anthracite float featured four marksmen "firing away at anthracite's competitors, Russian coal, coke, soft coal and oil." The parade acknowledged that the region needed to boost "its faith in anthracite . . . the region's basic industry." The *Scranton Times* editorialized that the parade "demonstrated that the home town folks are deeply interested in the movement to help win back the market for anthracite . . . to increase production and provide employment." The editorial itself, however, indicated that hometown folks knew that the battle had already been lost: although estimates put the crowd at 50,000, "Maybe that number is a bit of an exaggeration, but even if the number was only 25,000, and that would be conservative, the throng was big enough to warrant the undertaking designed to climax Anthracite Week." It didn't help parade promoters that—as if mourning a failing industry—"just as the last section was passing the reviewing stand at the Mitchell monument . . . rain began to fall."[82]

■ ■ ■

Expressing a narrative of subsidence, Paul Kelley explores in "The Hollow City" the local legend of walking the length of Scranton underground. The poem expresses nostalgia for a time when men moved freely beneath the streets. Opening with a declaration delivered in the past, "It shall be known as 'The Hollow City,' " the poem moves swiftly forward in the past, to the "1960s when flushing / of the tunnels with culm began."[83] In lines 4–7, the man goes "into" and "through / the earth" toward his resurrection, when he "come[s] out" beyond the city limits. Lines 7 to the end, ten lines total, describe in detail his walk.

Before the flushing projects, a man underground "could walk Southside, Central City, Pine Brook, / Green Ridge, Providence, & on" (8–9). A line break separating neighborhood names alludes to a green world: Pine Brook, Green Ridge. As if acknowledging the artificiality of this green space, the walker emerges from the earth in Dickson City, named after an industrialist who built locomotives and railcars.[84] A mental map for surface dwellers familiar with the city, which goes unnamed, the list of neighborhoods questions the assumption that a city is only what one sees.

The title's hollow city is also the now-abandoned city beneath the city, a multiple layer of routes, workspaces that both supported and unsettled surface life. Mining supported the surface economically; it unsettled the surface literally and psychologically. For those who worked below, their subsurface world was a palimpsest of surface life. An experienced miner knew where he was underground in relationship to surface locations, something Stephen Crane discovered in 1894 when he walked beneath Scranton "for miles, in the black streets of the mines."[85]

"The Hollow City" reimagines the literary flâneur, an urban stroller at leisure to observe city sights. The flâneur in "The Hollow City," presumably a miner, sees only the empty tunnel he follows; enveloped in silence, he hears surface sites: "trolleys running on Pittston Avenue" (12), "bells of classes changing" (13), and "voices of people singing / in the churches" (15–16). That these constitute public spaces reminds readers that the walker trespasses through private property. Surface and subsurface may be legally separate in Pennsylvania, but in "The Hollow City" they interpenetrate. In line 10, for example—"and he could hear there"—the double homonym overlays sound and space. That the speaker places the walker there, hearing sounds above, situates the speaker on the surface, where, presumably, he can see and hear what the man underground only hears.

Although the flâneur in "The Hollow City" exists solely in the eye of the nostalgic speaker, the urban myth of walking through Scranton underground may have been reality: "State authorities allowed companies to dig interconnecting passageways and conduct some 'development work' in higher lying sections of the barriers. For this reason, miners have spoken about the possibility of walking underground from one end of the northern field to the other."[86] "The Hollow City" laments that this perspective from the pit has been blocked by pillars of culm.

What we discover in Scranton's dominant narratives, however, may be only what we already know. In mine subsidence, the distinction between surface and subsurface evaporates, revealing to us that what was out of sight was always there. And what's there is evidence of a mining for resources that is only, maybe, a less apologetic form of the mining that goes on all across the surface, all the time, everywhere. If nothing else, Paul Kelley reminds us that we are not pure, here in the light, and, no matter how clean we claim to be, we profit from the dirty work that others do in darkness.

Lately, a new chapter in the region's mining history has opened, this time mainly in Susquehanna and Bradford Counties. Natural gas companies tell us that any losses here will add up to gains elsewhere: their work will make the United States stronger. So far, though, these companies have downplayed the aftermath story, which has already begun with poisoned water, clear-cuttings for well pads and pipelines, and unstable ground.[87] What more will this aftermath story reveal?

Poets help us to understand the stories we tell ourselves. If our stories trouble us, maybe we need to tell different stories about who we are, where we've been, and where we hope to go. If we're serious about this work, we need to listen to the poets among us.

■ ■ ■

A mine subsidence forces us to wonder, What do we do now, given what we've done? When extraction industries move on, how do those left behind live with what's left? How do communities cope with an environmental legacy such as mine subsidence? Is accepting instability enough? Repairing damage may demand shoring up remains, but it also means not making the same mistakes twice. Then again, how often have we decided not to repeat our missteps?

In the Anthracite Region, the first recorded refilling of a mine—called flushing—placed a Catholic church on solid foundations. In 1864, a Shenandoah priest, finding his church in danger of collapse, pleaded with the Philadelphia and Reading Coal and Iron Company to flush breaker waste under the structure, which saved it from destruction. European engineers visited the site, studied the operation, and returned home "to make flushing an integral part of the mining process instead of an auxiliary." Early on, some local coal companies flushed their mines, pouring water-and-culm mixtures behind wooden brattices that allowed the water to drain away. Hardened, the mixture formed a pillar. Later, however, mine operators discovered that it was cheaper simply to pile waste and let it sit. As a result, filling voids in subsequent years became an enormous task.[88]

Scranton could not do it alone. To flush city mines in 1938, for example, would have cost $15 million. In 1942, engineers claimed that "flushing eight separate areas" would eat up $50 million. Federal officials put the price in 1962 at $15–$20 million. Flushing would require not only a lot of money but also a lot of material. The city found help in the early 1960s when the state and federal governments launched Operation Backfill, a flushing program designed not only to prevent mine subsidence but also to erase culm banks, which were "fire hazards, air pollution sources, and eyesores." Targeting areas in the Anthracite Region where "subsidence threatened 'public health and safety,'" Operation Backfill funded flushing projects not only in Scranton but also in Wilkes-Barre and Plymouth.[89]

IHM sisters could not afford to wait for help. To fill voids in 1929–1931, the congregation spent a lot of effort and money flushing parts of campus that coal companies had “improperly protected.” Warned in October 1928 about the need for a “major flushing project” to protect campus buildings, the sisters decided to do the work on a “smaller scale.” Over the next several years, mining engineers urged more extensive efforts, but the congregation could not afford them and the sisters likely did not realize the extent of the danger. Adding to their caution, in 1929 the bottom fell out of the world economy. But the cave-in threat did not disappear: through 1937 underground issues forced the congregation to spend “much time . . . in consultation with engineers, attorneys, and coal company executives.”[90]

Despite so much instability—in campus grounds and campus finances—IHMs had enough faith in the college and congregation to contract in 1935 for the completion of the Liberal Arts Center, which included adding murals to the rotunda dome. Against the noise of crews flushing culm underground, an artist quietly painted scenes that depicted the natural world as background and symbol within the paintings’ principal drama, the relationship between humanity and the divine.[91]

Planning in the 1940s and 1950s to erect more buildings, IHMs kept flushing material underground. In 1940 and 1941, the congregation leader exchanged letters with Pennsylvania Coal Company on monthly and “even weekly” bases about “safeguarding the grounds under the motherhouse and college buildings from further subsidence from mining of supportive remaining coal pillars.” In May 1946, when shortages of construction materials, due to World War II, forced the congregation to postpone expansion plans, the sisters concentrated on “badly needed flushing projects to secure the underground.” One company flushed thirteen acres and then warned the congregation about “unsafe conditions” in areas beyond this lot of land.[92]

In June 1951, a state mine inspector recounted for the sisters the history of campus flushing projects. He reported that miners had removed from under campus about 55 percent of the coal, which suggested that enough support remained. Recalling that in 1940 Pennsylvania Coal Company had “sold and deeded thirteen (13) acres of the said underlying area to the College,” he noted that his investigation right after the purchase had recommended that the “voids in the top or Pittston vein (13' high) and the second or Clark vein (6' high) should be flushed.” Not until 1947, however, did a contractor pour into the Pittston vein more than seventy-eight thousand cubic yards of material and into the Clark vein another twenty-nine thousand cubic yards. The inspector assured the sisters that this work and the flushing completed by "Pennsylvania Coal Company in all veins at the time of first mining in the area [have] removed all danger of settlement."[93] Not quite. Since 1991, campus grounds have suffered six subsidences, all small. The largest, in 2004, collapsed a parking space in the Pit Lot.[94]

Burying history doesn't work. Plugging one time and place with the remains of other times and places, flushing may patch the past, but it cannot make the past go away, no matter how we pack the hole. In 2014, for example, a mine subsidence closed part of McDade Expressway, a main artery into Scranton, at a spot that had opened in 2007 into a hole thirty feet wide and eight feet deep.[95] Backfilling and flushing may disguise gaps, but they cannot prevent epiphanies.

Engineers suggest three ways to maintain the world above. In cave-prone areas, they advise building flexible floors and walls, pillars that stand on bedrock, or slabs to bridge breaches. The more prevention, they argue, the less likely history will undo surfaces. In taking their advice, we frame patterns against the return of the past.

How to keep the past at bay, then, depends on the nature of the ground. At Marywood, the art center sprawls across a concrete slab; the gymnasium rests on concrete pillars, and the next-door O'Neill Center for Healthy Families rises from the usual substructure. These buildings huddle within shouting distance of each other.

Marywood is not the only Catholic university in Scranton that wonders about its foundations. In September 1962, the University of Scranton dedicated St. Thomas Hall, built at a cost of $1.4 million, plus $50,000 for surface support. Named for the theologian, not the disciple, St. Thomas stands on thirteen-foot-thick "columns of debris" and culm from at least one flushing project. More recently, the 2012 Loyola Science Center spans a concrete slab so that it can ride out any subsidence; concrete pillars under the college library reach the deepest measure. Universities in Scranton, however, are not the only colleges wary of subsidence: cave-ins of old clay mines worry Colorado School of Mines.[96]

Pouring culm banks beneath the surface assures us that we can mine the mine again, if we so choose, but it also seals off access to the underworld. People now must guess at what lies beneath them; with no one to bring us news from below, we rely on old maps, which may or may not be accurate, as we stand on pillars of waste that, we hope, stabilize our waking life.

■ ■ ■

After cutting with his sword a trench, Odysseus pours into it honey, milk, wine, and water.[97] He sprinkles in barley and then coats the mixture with lamb's blood (160). Instantly, swarms of wraiths swell from the earth amid an "eerie clamour" (160). At the edges of past, present, and future, his "sword stretched out above the blood," Odysseus watches the dead hover at the lip of the trench, thirsty (161).

He recognizes first unburied Elpenor, a comrade who had just broken his neck in a drunken stupor, and then his mother, alive when the ships sailed from Ithaca, long years ago. Brandishing his weapon and searching for Tiresias, the blind seer, Odysseus anxiously keeps the pair from the sacrifice.

Tiresias appears.

"Odysseus of the nimble wits," the prophet says, "what has brought you, the man of misfortune, to forsake the sunlight and to visit the dead in this joyless place?"

Odysseus steps back, sheathing his blade. He nods.

Tiresias drinks.

"Odysseus," the dead man says, "you seek a happy way home. But a god is going to make your journey hard."

The seer offers Odysseus neither map nor guidebook. He tells the hero that he may make it to Ithaca, but the journey depends on a series of ifs and the will of the gods, who have divided over his fate. No matter how, the way will be long and "not without suffering" (162).

If we listen, the dead can guide us home, even when we know that others have undermined the place, changed and trashed it.

SEVEN

Burying Books

■ ■ ■

For it is a tale of books . . .

Umberto Eco, *The Name of the Rose*

I joined a campus tour in January. Six of us huddled inside the Admissions Office to meet Brielle, our guide, a junior communication arts major. Two prospective students, both high schoolers, announced their intended majors, he in architecture, she in nursing. The parents beamed.

Brielle brought us under the rotunda dome.

"It's the second biggest in Pennsylvania," she said. "Only the capitol in Harrisburg is bigger."

The parents looked up.

Heads down, undergraduates swept by, bundled in coats, burdened with backpacks.

"Most of my liberal arts courses met here," Brielle said. "You need two classes in philosophy, two in religious studies."

Outside: freezing temperatures, a blanket of snow, and gray skies that promised more of the same.

In the library, Brielle pointed to the coffee shop, complained about too few windows, and mentioned that sometime over the summer crews would break ground for a new building. We ventured no further. We asked no questions.

An idling fire truck blocked the sidewalk in front of the architecture building. As we stepped inside, three firefighters, headed home, glanced at mock-ups of imagined structures. Unlike in the library, natural light flooded the space. A renovated gym, the place retained the floor of the old basketball court and the incline of the former pool, whose deep end was lined with empty book shelves. A mezzanine overlooked us; high above, a grid of ventilation pipes.

Brielle explained that the remake was only five years old; she loved the movable walls and the openness. Upstairs, she led us by long rows of paper-strewn workplaces. A few students glanced up, expressionless.

Leading us through a dorm room, Brielle listed her activities, including radio and web work, and her involvement in student government.

"You can make a difference here," she said, "if you want to. I got involved my first year."

I imagined then my fellow tourists knowing Marywood as a place where students absorb a great education shaped by obvious patterns that lead directly to well-paying jobs.

We visited the new gym, strolled back to the Liberal Arts Center, and stood under the rotunda murals.

"Any questions?" our guide said.

I left the tour there, thinking that Brielle had not mentioned mine subsidence or mine fires, which was not surprising, but I found it ironic that we saw neither the chapel nor the bookstore, and that the only mention of the founding order happened when a parent asked about the building tucked behind campus, beyond a screen of trees: the sisters' motherhouse, the IHM Center.

■ ■ ■

To open a Catholic mass, an acolyte carries aloft a Bible as he leads the priest to the altar. At the high point of the rite, after the congregation has heard Old and New Testament stories, the celebrant raises the book, knees before it, and kisses it. In this moment, participants treat the book as more than a symbol: the book is the breath of God. To touch its words is to touch the Word. Tapping a computer screen instead would seem, somehow, sacrilegious.

Marywood has long placed its faith in books. Recently, however, it confronts doubts about them and wonders whether preserving physical books is worth the space. In 2015, the school opened a new library that places books out of sight, underground, accessible only by machine. Ironically, mine voids determined the building's size, location, and orientation. What happens to the liberal arts when a house of books, once the foundation of higher education, stands on an uncertain site?

In 1915, Marywood challenged women to read books that expressed the memory and imagination of the Western world. Requiring courses in history, French, religion, and philosophy, a four-year degree demanded that students read two sets of literary texts. Making their way through the first list, they absorbed *The Odyssey*, *The Iliad*, *The Aeneid*, and the Old Testament. They then tackled *The Tempest*, “Kubla Khan,” *Walden*, and scores of other works in several genres before confronting the second, shorter list: a choice of four works, by mainly British writers, among them Shakespeare, Milton, and Tennyson.[1]

To lead students from surfaces to depths, the college encouraged this two-step reading process. For the first list, the student was to “read the books carefully, but her attention should not be so fixed upon details that she fails to appreciate the main purpose and charm of what she reads.” Her reading grew more complex, however, with the second list, because she was to read these books with “greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions.” The purpose: to “foster . . . the habit of intelligent reading and to develop a taste for good literature.”[2]

Fiction dominated the first Marywood library, a collection of two thousand volumes in a single room in the original motherhouse. Outgrowing this first home, the college broke ground in 1922 to build a new one, in the Liberal Arts Center, which was dedicated in March 1924. The next day, a student bucket brigade lugged twenty thousand books across the street. Occupying space on two floors, with stacks below, the new library, adjacent to the rotunda, faced the *Mural of Christian Education*.[3]

Despite growing, Marywood struggled to build a freestanding library. In 1951, the Middle States Accreditation Association criticized the college’s inadequate library and recommended that it build a new one. Ten years later, with no new library, Middle States made a building project “mandatory.” On the same day that it received the directive, in July 1960, the congregation moved to add a mezzanine to the LAC collection, a stopgap measure meant to satisfy the accreditor. Although the renovation almost doubled space for seating and shelving, Middle States refused to retract the expansion order.[4]

Ironically, the eventual new building prophesied doubts about books. Dedicated in May 1968, the Learning Resources Center (LRC) connected a library to radio and TV stations. At the ceremony, a federal judge proclaimed that the LRC “speaks out more eloquently than words . . . of the farsighted and pioneering spirit that personifies Marywood College”; he declared that “this marvelous center is more than a library, it is a multi-media complex fully prepared for the demands and challenges of a technological era in the field of education. Its roots are in the book, the printed page, but its branches reach out and encompass the world of television, computers, and electronics.”[5] Forty-five years later, Marywood would use the same rhetorical moves in advertising its fourth library, another more-than-a-library library.

Octagonal outside and circular within, the windowless LRC library made it tough to know where one was among the stacks. I don't know how many times I had to make an almost complete circuit of the central stairwell to find the steps between floors. One should not get dizzy in a library: if nothing else, the place should help one to find an orientation to the world. Add to this that the library had little natural light, and it's no wonder it encouraged a sealed-off feeling that invited few to linger long inside.

The first time I taught Introduction to Literary Studies, I required new English majors to do a midsemester scavenger hunt, "Adventures in the Library." The quest frayed nerves: people discovered that they did not have time to do every exercise. Documenting two events that happened on the day a poet died unnerved folks who assumed that everything assignable is possible. Whereas in-class quizzes demanded that they pay attention to the world beyond writing and literature—from the features of the classroom to the latest international news—the scavenger hunt taught them to realize that knowing requires planning, luck, and librarians. I wanted them to understand that the world was their subject and that studying English was one way to organize it, a fact consistent with the first day of class at Marywood, in September 1915: underscoring the interrelationship between text and place, students arrived at their first English class only to be directed outside to study campus grounds.

■ ■ ■

I wrestled with relationships between text and place as I reread *The Name of the Rose* (1980), a murder mystery set in a fourteenth-century Italian monastery.[6] Offering answers, but no single answer, the novel led me to wonder to what extent books offer access to the world. Mixing fiction and fact, imagination and history, the detective story is less about solving crimes than it is about the significance, danger, and unstable nature of books, language, and libraries.

Franciscan monk William of Baskerville and Adso, his Benedictine protégé, arrive at the monastery to find this bastion of divine truth in quiet uproar because a young monk has been killed, possibly murdered. The abbot asks the Franciscan to investigate. In the following days, four more men die, including the abbey librarian and his assistant. To solve these mysteries before the arrival of a papal delegation, William turns detective. In searching for the truth, this reader of Word, word, and world studies evidence, formulates hypotheses, and deduces patterns that he then tests to confirm their existence. Basing what he knows on his experience (244)—and not on authority or universal precepts—William knows that each pattern may be only a temporary guide. To do his work, he does what detectives do: he thinks, he questions.

In its own structure, *The Name of the Rose* recreates the inherent instability of books. A text within a text, the novel is a translation of a translation that includes important changes—beyond stylistic—that the first translator silently introduced while working with the original manuscript (xvii). Adding to the fragility of the text, the second translator cautions that the manuscript, written in the 1380s or, maybe, the 1390s, is "shrouded in many, shadowy mysteries" (xvi). That the writer of the original, Adso, an elderly monk, recalls his experiences as a novice further shadows the reader's reliance on knowing fact from fiction, exaggeration from misinterpretation.

The main characters represent opposite understandings of the stability of texts. Faithful, naïve, and curious, Adso believes in the soundness of language. He accepts that "in the beginning was the Word," the "one never-changing event whose incontrovertible truth can be asserted" (3). From this foundation, he orders his world, in which truth is knowable and has always been available (9). Educated in the theology of Thomas Aquinas, the novice trusts the writings of church fathers as answers that end ambiguity. Challenging this training, William instructs the boy that "books are not made to be believed, but to be subjected to inquiry. When we consider a book, we mustn't ask ourselves what it says but what it means" (380). And any book, William knows, can mean many things.

William does not accept on faith the truth of what he reads. The emperor's envoy, he comes to northern Italy to coordinate a tense meeting between Franciscans and the pope over the meaning of the New Testament (168). An empiricist, William, like his friend William of Occam, believes that reality resides in individual things, not in universals.[7] From his mentor Roger Bacon, he also knows that forestalling the Antichrist requires one not only to study the Word but also to learn the "secrets of nature, [to] use knowledge to better the human race" (68). For these men, to combat evil is to know not only the Bible but also the world (82). The Antichrist, herald of the Apocalypse, seeks to deprive people of both learning and living.

Church leaders know the Bible as the embodiment of truth, a faith the novel questions through Bernard Gui, member of the papal delegation. The inquisitor, famed for burning heretics, presumes the guilt of people he interrogates. Less interested in truth than he is in protecting papal power, Gui questions one monk to connect the accused not only to crimes at the abbey but also to heretical

Franciscans, and, by association, to all Franciscans, including William, who sides with the emperor and not the pope. Despite her innocence, Adso's love interest, rounded up with the condemned, will also die; Gui will burn her as a witch to teach villagers a lesson about challenging church teachings (491).

Unlike Gui's inquisition, William's murder investigation proceeds on the assumption that in most cases truth is less than certain. A former inquisitor who now studies natural phenomena, William reads the world using his reasoning skills and not the rules of authority. Unfortunately, he realizes too late that no single pattern ties together the murders. What he thought was a pattern based on the book of Revelation turns out to be his own creation. Admitting that he "behaved stubbornly, pursuing a semblance of order, when [he] should have known well that there is no order in the universe" (599), he acknowledges that whatever order does exist may be only partial, personal, or accidental. As evidence, he tells Adso that for God to be free no order can exist; otherwise, God would be subject to its laws (244). But to act in the world, people must assume order within it. Faced with this difficulty, what is a monk to think, let alone do?

■ ■ ■

I teach literature because I believe that fine writing increases our capacity for understanding our relationships with each other and the world around us. In connecting my time and place with past lives and places, literature helps me to know better my own place in the world, literally and figuratively, because it enhances my awareness of language and helps me make sense of what I see. As I read a novel or a poem, its details and turns of phrase cohere to form representations of lived experience. Ordering these patterns, I build a world in my imagination, one born from the everyday. The more I know about myself and others, my thinking is, the more ethical my choices may be.

Only the dead stay home. Anyone alive is unsettled; I'm often elsewhere, even where I am, and especially when I'm reading. Carried beyond home, I hear other minds, see through other eyes, and experience new ways of being. All this moves me to see home anew, to reimagine it as a strange place. An interweaving of settings and points of view, literature enacts strangeness, making my attention to people and place complex, messy, and evolving.

To teach students how to read critically is to help them to have more access to ideas. Part of this is pointing them to good books, a necessary judgment call. Through explaining what books say, learning how they say it, and expressing what they mean, readers exercise their ability to respond to what they encounter, in writing and in life. Confronting mass information, those without skills to read critically and carefully will have only facts, at best; at worst, opinions and propaganda that masquerade as fact. Acquiring and practicing these skills pose a challenge in a world of instant communication. Slow reading is work, especially when you tackle a long, many-layered piece while resisting the pull of likes, bytes, and tweets.

People may be losing interest in this work. In 2004, the National Endowment for the Arts (NEA) reported that the percentage of Americans reading books—any books—was "declining significantly"; between 1992 and 2002 the rate of reading dropped 7 percent. In the same decade, Americans abandoned reading literature at a rate of 14 percent. The NEA report, *Reading at Risk*, sounded the alarm that "literature reading is fading as a meaningful activity, especially among younger people."[8] Or maybe not. In 2009, an NEA follow-up found a significant increase in the number of adults reading literary works. NEA attributed this rise to renewed efforts to encourage reading, efforts triggered, in part, by its 2004 report.[9]

While interviewing a sophomore for admittance into an education program, I asked, "What is the last book that you read and what was your reaction to it?" She said, "I don't read books." When I asked her to describe the last piece of writing that she had read outside of class, she had to think for a moment before remembering an article in *Ladies Home Journal*. Back then, the late '90s, I was surprised that she had completed high school, let alone a year of college, without reading a single book. These days, I'm less surprised than I am saddened. Not everyone reads, let alone reads books, but a future educator, I believe, ought to be a reader. If you're not reading, what are you teaching?

■ ■ ■

People are sometimes unhappy that colleges and universities challenge undergraduates to confront unsettling texts. A student at Crafton Hills College made national news in 2015 when she complained about the graphic content of her graphic novels course. She took offense at scenes of torture in Marjane Satrapi's *Persepolis*, which depicts the coming-of-age story of a girl living through the Iranian Revolution. The torture victims, enemies of the state, whether secular or sectarian, were writers who questioned the reigning regime. Each ruler in the text rewrote history, banned books, and jailed and killed dissidents. The offended Crafton Hills student, an English major, explained, "I don't want to ban [these] books or burn them . . . I just don't believe they need to be in an English course."[10] Her complaint at first led to a disclaimer added to subsequent versions of the course syllabus, but the warning was later removed, prompting the college president to point out, “We strive to equip our students with the critical thinking skills to reason through difficult issues that challenge their values and beliefs.”[11] Behind this dustup loomed questions about the definition of literature and about whether colleges should shield students from horrors in the world.

Students need guides, not gatekeepers. Unlike censors, guides refuse to regulate reading. The line between guide and censor may blur, but it is important to keep drawing it. To limit access to books is to limit access to ideas, which is to deny people access to the world. At a Catholic university, access gets complicated because of the church’s history of censorship. Add to this that Catholicism has never especially encouraged people to read the Bible, its foundational text, which, the Vatican asserts, requires the church’s guidance to understand. For the church, books are good or bad. Good books support—or at least do not criticize or offend—its teachings. Bad books do the opposite.

Throughout its early history, the Catholic Church condemned “bad books,” but it ratcheted up censorship after the invention of the printing press and the onset of the Reformation. With movable type making more books more available to more people, control of books—ideas—became a huge headache in attempts to protect church doctrine. When Leo X excommunicated Martin Luther in 1520, he not only ordered destroyed all that Luther had written but also “forbade publication or reading of all of his future writings.” The church institutionalized censorship in 1564 with the Index of Forbidden Books. Although administered for only eight years by the Inquisition, the Index has never lost that office’s reputation for repressing ideas. Books by Voltaire, Descartes, and Kant all made the list, which remained in effect until 1966.[12]

Censoring books sometimes meant burning heretics. In fifth-century Alexandria, monks snatched the mathematician Hypatia from her chariot, flayed her, and burned her with a pile of books. In 1415, the church burned Jan Hus and his books; in this period, the Vatican also exhumed the corpse of John Wyclif and burned his bones with his books. In Geneva in 1553, Michael of Servetus stood at the stake with a book tied to his waist.[13]

The church still condemns books. In 2012, the Vatican banned Catholic educators from teaching *Just Love,* by Sister of Mercy Margaret A. Farley, who taught at Yale Divinity School. At its publication in 2006, the book met widespread praise; the Jesuit magazine *America* viewed it as an “important message in a time in which sexual abuse and violence are rampant, and the Catholic Church has failed to protect children from sexual exploitation.” The Vatican censored *Just Love* because of its views on divorce, masturbation, and homosexuality.[14]

The Catholic Church has not been the only censor of books. To “destroy all Chinese literature, all history, all philosophy written before the founding of his dynasty,” the Qin emperor Shi Huangdi, builder of the Great Wall of China, burned books and buried scholars alive. In 1933, Nazi university students emptied public and private libraries to feed bonfires across Germany. During their hold on power, Nazis burned one hundred million books and in the Holocaust murdered six million Jews, reminding people of the prophecy of Heinrich Heine, “There where one burns books one in the end burns men.” After overrunning Tibet in the 1950s, China systematically attempted to erase Tibetan culture. The Red Guard destroyed Buddhist monasteries, burned religious texts in front of temples, and trucked valuable artifacts back to China. Observers calculated that Tibet lost not only “60 percent of its literature” but also an “estimated 85 percent of the nation’s written materials and documents.”[15]

Armies often single out libraries. During World War I and World War II, German forces leveled the library at the University of Louvain. During the Bosnian war, in 1992–1995, Serb artillery targeted the Bosnian National and University Library, burning the building and 1.5 million books. In the 1990s, opposing Northern Alliance and Taliban forces attacked Kabul University Library. In 2015, forces of the Islamic State not only destroyed thousands of books of the central library in the Iraqi city of Mosul but also attacked the library at the university. To ensure that everyone got the message about what should not be known, the fighters burned books in front of students.[16]

Rulers and religions seem not to realize that books have lives. Like people, they come and go, but the ideas they embody endure: they live on in minds, hearts, and all corners of human life. Ideas may get expressed in books, whether physical or electronic, but they are never confined to them. Nor do books and ideas need professors or universities, which are not their gatekeepers, though they can be good guides to them.

■ ■ ■

The library in *The Name of the Rose* represents the world, in form and content. Much larger than the typical medieval collection, which was often only a single, upstairs room,[17] the abbey library amasses books from all corners of the world, Christian and non-Christian. After William and Adso sketch from outside the pattern within, they realize that the library, ordered by region, reproduces the medieval map of the globe (377; see 385). Using their map as a guide, the detectives navigate the collection—the world—through books from parts of Asia, Africa, and the rest of Europe (386).

Faithful to the Word, the library guards the truth it has inherited. The abbot refuses William and Adso access to it, despite its centrality to their investigation (33). To inhibit all curiosity, even the forty monks who translate, illustrate, and copy texts have no right to the stacks, which are housed inside an octagonal, former fortress of “exceptional size” (22). Only the librarian has the “right to move through the labyrinth of books” (35–36), and, as if this were not enough, the abbot must approve access to heretical, forbidden texts. To further protect the books, which testify “to truth and to error” (148), the library disorients unauthorized visitors. A maze, its layout leads people in circles; along the way, mirrors frighten them, the ventilation system unsettles them, and hallucinogenic herbs dizzy them. In this center of learning, William complains, “knowledge is used to conceal, rather than to enlighten” (203).

Behind the murders lurks a question: Are libraries for preserving what we know or for extending it? Adso and the abbot believe that libraries should keep books safe from prying eyes because the truth that they store must be kept intact, not extended. They would treat books as treasures. The elderly Jorge agrees: the work of a monastery is “study, and the preservation of knowledge.” This Spanish monk understands divine wisdom as “complete . . . defined since the beginning, in the perfection of the Word which expresses itself to itself.” Defining the world as an ordered, finished form, he warns his fellow monks, “There is no progress, no revolution of ages, in the history of knowledge, but at most a continuous and sublime recapitulation” (482). Based on this assumption, he concludes that “there is nothing further to say. There is only to continue meditation, to gloss, preserve” (483).

As did several murdered monks, William believes that there is more to say, much more. Ever curious, he pursues answers in the spirit of Roger Bacon, who sought “to employ his learning to make God’s people happier” (478). Knowledge is to be expanded and used, not hoarded and hidden. Understanding libraries as workplaces where readers know books as tools that aid others, he sees no purpose in preservation for its own sake: “The good of a book lies in its being read . . . This library was perhaps born to save the books it houses, but now it lives to bury them” (478).

■ ■ ■

Google and the Internet allow us the fantasy that all information is available online. And we do appear to have greater access to more information than ever, maybe too much. To get anything done, how do I wade through this mass of ads, facts, and arguments? In an ideal world: slowly, carefully, critically. Good guides can help, and the best leave me to judge what I read. Along with my own experience, I look for guides among friends and family, colleagues and strangers, and social and cultural systems, including, maybe especially, libraries.

The word "book" means scholarship, study, and reading, and comes from the Old English *boc*, which may be related to the Old Norse *bok*, or "beech tree." Similarly, the Latin word for book, *liber*, root of the word library, means "tree bark." Roman tradition recalls that ancients first wrote on bark; hence the double irony of Marywood cutting trees to build a place to bury books.[18]

My little library, a red room on the second floor of our house, ranges across bookcases that I built of pine boards I assembled with screws. I made two sets: the longer, eight shelves, stands 8' × 12'; the shorter, with seven, 5' × 10'. Painted white—the knots bleed through—each is held to the wall with a single bracket. On the shelves: mainly paperback histories, novels, plays, poetry, and creative nonfiction, with here and there some philosophy and religion, world atlases and photo albums.

The books stand side by side, in no particular order, the places they represent paralleling one another: *Anna Karenina* separates *The Kite Runner* and *The Joy Luck Club*. If place encompasses all of a location—people, plants, animals, weathers—then my library, like most, I imagine, brings into immediate relation far-flung local and global places. In this way, a library, a collector of human memory, opens doors to worlds; democratizing ideas, it refuses to distinguish between good and not-so-good information. For that, one goes to guides.

Are university librarians guides? Originator of the basics of librarianship, Melvil Dewey opposed the idea that his nineteenth-century colleagues should directly guide people's reading choices. He argued instead that collection development and efficient reference help would "mold the very reading habits of his patrons." The American Library Association (ALA), however, thought differently; the ALA "cultivated the authority to direct the reading of their patrons." The ALA position, a common one among librarians, today as then, supported a "Promethean impulse to improve the cultural lot of all mankind." In response to recent changes in communication, including the Internet, librarians have "cast themselves as guides who can lead patrons to the sources they need in the vast landscape of information . . . Much of this guidance takes the form of critical evaluation of sources to determine which are relevant and credible among the many that can be summoned with the touch of a button." Whether these guides will have a library home in this landscape remains to be seen.[19]

University libraries face a stark choice: adapt or die. Fewer students use them; gate counts have declined drastically, 20–30 percent since the mid-1990s.

Although the largest libraries buy as many books as possible, upwards of 80 percent of their print collection never circulates. Some predict that many universities will soon share one large print collection housed at a remote site; this will free the individual university to shrink its print collection to only books that meet local needs. Requiring no physical space, e-books and subscription databases promise to fill gaps, further cutting collection costs.[20]

But e-resources come with disadvantages. So far, e-books have attracted fewer readers than boosters expected, perhaps because reading long-form writing on-screen tires the eyes more quickly than reading print. Technology may solve this problem, but e-formats are not free: after factoring in all costs, producing an e-journal, for example, may not be much cheaper than publishing one in hard copy. Interlibrary loan and e-subscription bundling by library consortia have led less to "mutual benefit" than to "mistrust, chaos, and greater expense." Subscribing to e-materials, which is temporary, puts libraries at the mercy of vendors, who can cancel subscriptions for any reason. In purchasing e-subscriptions, libraries rent access to materials; in doing so they abandon their mission to preserve human knowledge, which defaults to vendors, who are less interested in preserving information than they are in expanding bottom lines. Forms of electronic materials will no doubt disappear as technologies advance, and when they are gone so may be the information they stored. No doubt, the future of libraries depends on "the future form of collections."[21]

E-books have not yet earned a reputation for concreteness and imperishability. Requiring computer platforms, which often change, e-books may not have long shelf lives. A kind of magic, an e-book appears out of nothing and scores of them can be held in the palm of one's hand, but easy access gets eclipsed when vendors require a library to loan only one copy of an e-book at a time or when they keep a library from granting an interlibrary loan request for one. Although many components of paper books are grown and manufactured, electronic books require computer parts that must be mined and manufactured.

Which is easier on the environment: a physical book or an e-reader? I hear that an e-reader saves trees, but I wonder whether this faith recalls the digging required for its raw materials. A labor-intensive process, mining for rare-earth metals, for example, creates toxic and radioactive waste that has the potential to spoil groundwater and to poison people. At the same time, dealing with defunct electronics has become a global challenge: as computer technologies spread, e-waste piles up. Often enough, it gets shipped to developing nations, where people disassemble it in "backyard recycling," which has led to major human and environmental health problems. Then again, in 2008 books and newspapers took 125 million trees, created wastewater issues, and burned fossil fuels in their move from seller to buyer. With an e-reader I own a device so that I can briefly rent access to books; with physical books I own objects that can last decades. An e-reader I can slip into a small space, but books fill buildings and expand landfills. I power an e-reader, a fairly fragile machine, through a metered connection to transmission lines; sturdier, a book I flip open for free with a finger.[22]

■ ■ ■

Medieval libraries were reader centered: in a small room at a desk next to a window a lone monk sat with a book. In the late nineteenth century, following a revolution in papermaking, libraries expanded shelving to accommodate ever more books, pushing readers to the margins. In the late twentieth century, the book-centered library, challenged by the Internet's easy access to information, evolved into the "learning-centered" library, which pushed books back to the margins. With shelving no longer driving building decisions, the library became once again reader centered but this time as a site of information sharing and research collaboration.[23]

A response to the information revolution, a learning commons reimagines a library as less a quiet-study space than as a humming workshop. Comfortable furniture, cafes, and the latest technology characterize a commons. Designed with no particular function in mind, a learning commons recalls the "fora and agora of the ancient world, the town commons of a later era, or the student debating societies of the nineteenth century." A sign of the changing nature of academic work, the learning commons encourages faculty and students to meet across disciplinary boundaries.[24]

To prepare for construction of the Marywood learning commons, the library weeded its collection, tossing dated books and print journals. A full run of *Harper's* and decades of *Scribner's* nearly landed in dumpsters before faculty members pointed out their value for understanding American art and literature. Microfilm disappeared: the library donated to a genealogical society a near-complete run of the *Scranton Times*, a major local daily newspaper dating back to the 1890s. One must now pay to access this archive, which, admittedly, few at Marywood used.

Officially opened on September 8, 2015, the school's centennial date, the Learning Commons overlooks a memorial garden that recalls in its outline the original motherhouse, site of the first Marywood library.[25] Surrounded on the surface by green space, the four-level Learning Commons, a green building, straddles five layers of worked-out coal veins, whose pattern determined the pattern of its foundation. Architects had to think about the structure's weight and had to adjust its height to keep it from crushing support pillars, which were last touched in the 1930s. The Pittston vein, or Fourteen-Foot, lay eighty feet below; the Clark, 265. Thankfully, in 1947 a contractor flushed these highest tunnels.[26]

From my office window in the Liberal Arts Center, I watched the new library take shape. In February 2012, I noticed that surveyors had marked with pink slashes the footprint for the new building. The following day, a crew parked a drilling rig inside the slash marks and began boring holes, testing the stability of the ground at the edge of the thirteen acres that workers had backfilled in the '40s. Beyond the thirteen acres, Pittston Coal Company had pulled the pillars, but not every void had been repacked; a hundred yards to the south, for example, subsidences opened in November 1936. On November 5, 2012, the day that Marywood workers removed *Christ the King*, a bronze dedicated in 1929, a surveyor made fine calculations about the space between the lawn and the sidewalk where the learning commons would rise. Almost a year later, on October 18, 2013, Marywood formally broke ground, at the site where the statue had stood.

Located at the "center of the traditional section of campus," the Learning Commons replaces the Liberal Arts Center as the "Intellectual and Social Heart of campus." Promotional material makes this move by excluding the LAC from its list of nearby "academic facilities" and by appropriating LAC prestige even as it renames the Liberal Arts Center the Rotunda, whose monumental artwork remembers saints, popes, and bishops. Anticipating questions about why Marywood needs a $40 million addition, this promotion points to the school's history of erecting buildings to meet "academic and community needs," a history that begins with the relocation of the college from the motherhouse to the Liberal Arts Center: "For nearly 100 years, the Rotunda has been recognized as a regional inspirational symbol of the most important experience in American life—education." Other than the *Mural of Christian Education*, the Rotunda encompasses no space devoted specifically to education. Substituting "Rotunda" for "Liberal Arts Center" ignores LAC instructional spaces and maintains silence about the liberal arts, despite their centrality to Marywood's mission.[27]

Deploying language that recalls the dedication of the Learning Resources Center, rhetoric advertising the Learning Commons in 2015 claims that bold-hearted Marywood has built a "21st Century library" that will "change minds about what a library is, how it works, and what it's supposed to do." The Commons: "It's not just a library." Fully stocked with "advanced interactive tools," the Commons has roots in "what was once the familiar library" but stretches beyond the "traditional"—in other words, the old—to "provide transformative education to new generations of students." To transform lives, the Commons also "improve[s] the way our faculty learn how to teach," so much so that faculty and librarians must now "work together to ensure that students productively use all the time freed up by our new sophisticated research processes . . . to spend more time reflecting on what they read." These research processes happen, by the way, when students "come into the Learning Commons, or log in online, and find information," something they did, of course, in the Learning Resources Center.[28]

Metaphors that describe the Learning Commons suggest that the place was built for workforce training. Architects added to the LRC media center animation and digital writing labs, a move designed, according to promotional material, to nurture an "environment infused with creative energy and engaged learning." One element of this environment, the Entrepreneur Launch Pad, which is about financial success rather than education for life, focuses on "creating economic opportunities for Marywood students and the broader business community." The Entrepreneur Launch Pad "fosters a climate of entrepreneurship that helps students across all academic disciplines to explore commercial opportunities based on their innovative business ideas." A suggestive symbol of priorities: the Commons houses its "collaborative learning environments" in the "Marketplace," which is in line with the university's definition of a learning commons as a "*full-service interactive learning, research, and project development resource.*"[29]

■ ■ ■

Can fiction, a "discourse of falsehood," lead us to understand better a "discourse of truth" (85)? The illuminator Adelmo, the first monk to die in *The Name of the Rose*, sketches in margins of books "bizarre and fantastic images" (91) that blend human and animal (84). Rendering nature unnatural (85), his drawings lead other monks to laugh, even though his illustrations comment on Scripture (86). The situation sparks a debate in the scriptorium about the relationship between laughter and the holy (88). Do his marginalia poke fun at a sober text, or do the distortions shed more light on the sacred? In recounting this debate, Venantius, the second monk murdered, recalls that "the question, in fact, was whether metaphors and puns and riddles, which also seem conceived by poets for sheer pleasure, do not lead us to speculate on things in a new and surprising way" (92). Is literature, in fact, food for the soul?

To save the world from the unsettling nature of laughter and metaphor, Jorge hides in the library Aristotle's lost book on comedy, which upends the ordinary world in the same way that metaphor upends ordinary language. Neither means strictly what it says. As abbey librarian before his blindness, Jorge orchestrated his control of the book by choosing his own successors. When he realizes that monks are now searching for the volume, he poisons its pages, thus killing the four who thumb through it. To keep the book from William, he begins eating it, an act that ultimately kills him, but not before he tosses the volume into a fire that soon levels the abbey (589). A figure of the Antichrist, the murderous blind man not only destroys Aristotle's book on laughter, thus robbing humanity of perhaps a new way of perceiving the world, but he also destroys a community that was "probably the last to boast of excellence in the production and reproduction of learning" (215).

For William, Aristotle's book might help people escape poverty and suffering because it theorizes how comedy opens our eyes. Having pieced together the book from reading other texts, he tells the sightless monk that Aristotle understood that comedy arises from "peasant villages—as a joyous celebration after a meal or a feast." Using "witty riddles and unexpected metaphors" to depict the "defects and vices of ordinary men," comedy offers us "things differently from the way they are, as if it were lying"; this leads us to "examine them more closely," making us realize, "Ah, this is just how things are, and I didn't know it." In revealing truth through laughter—without the wickedness, dead protagonists, or powerful people of tragedy—comedy, Aristotle claims, is a "force for good" (574).

Jorge cannot accept this. For him, laughter does what metaphor does: it turns things upside down. That laughter upsets hierarchical relationships between the learned and the "simple," between rich and poor, between church and people particularly worries him. If Aristotle's book were widely known, it would lead thinkers to elevate comedy to philosophy, which might free peasants from awe of the church, thus undermining its power. Because of Aristotle's renown, the book could light a "new fire to the whole world, and laughter would be defined as the new art, unknown even to Prometheus, for canceling fear" (578). With this power in hand, ordinary people would have means to speak about their suffering; in justifying "the idea that the tongue of the simple is the vehicle of wisdom" (582), the book would collapse margin and center, and "every trace of the center would be lost" (578). Jorge knows the power of books: they express and change people's thinking, which he, like so many, will kill to prevent.

Literary texts may be especially dangerous. William and Jorge debate whether metaphors—turns of phrase, nonliteral uses of language—offer access to or obscure the truth. Jorge abhors metaphor because it refuses literal interpretation, which can call into question a stable, ordered world: “Jesus had urged our speech to be yes or no . . . to mention fish it was enough to say ‘fish,’ without concealing the notion underlying sounds” (127). Perhaps more important, however, the monk abhors metaphor because surprising ones may lead to merriment, which he knows can undermine authority. As monks chuckle over a vernacular poem that expresses a world turned upside down, Jorge speaks for the first time, reminding them (in Latin) of the authority of the Benedictine Rule: “Speak not words which are idle or suitable for laughter” (87).

Unlike Jorge, William believes that metaphor reveals truth. He tells the blind man that even church fathers have claimed that “God can be named only through the most distorted things . . . the more the simile becomes dissimilar, the more the truth is revealed” (89). From this foundation, the Franciscan wields metaphor as an instrument to explain the world. Defining heresy for Adso, for example, he likens the church to a circle: the hierarchy holds the center, peasants suffer on the margins, and when the latter seek redress in new experiences, the powerful define them as heretics, forcing them back to the margins (236; see 174–175, 239–240). Whereas the church authorizes allegorical readings of the Bible, which teach readers to discover hidden meaning, William knows that books may also express double meanings. That language often says more than the literal means that words cannot refer without ambiguity to a preexistent reality. As Adso absorbs this insight, he realizes that books may point not to the world but to each other, a fact that leads him to reconceive a library not as a repository of truth but as a “place of a long, centuries-old murmuring, an imperceptible dialogue between one parchment and another, a living thing” (342–343). No matter how unstable they may be, books embody how we have understood the world, which is knowledge that we can use to change the world.

■ ■ ■

Burying books silences this dialogue.

The Marywood Learning Commons stores physical books out of sight, underground, freeing up space for open areas dominated by computers. To obtain a book, one must submit an electronic request to a robot, essentially a mechanical arm, which retrieves the volume from a vault that stores the entire collection. Although some libraries use these systems to house little-used materials, the Marywood library may be the first to keep its entire collection this way, books and all.[30] I cannot help but think that this system signals the final unmooring of Marywood's liberal arts tradition from its workforce mission. Hiding books in storage bins separates them from readers far more successfully than censors might, because the book, symbol of liberal arts education, disappears from the student's imagination.

At the heart of the center of campus, the two-story, $2 million Automated Storage and Retrieval System (ASRS) can hold, depending on their size, about 325,000 books.[31] Able to lift 750 pounds, the robot draws power from four motors, with the larger two generating ten horsepower apiece. Speeding up to forty-five miles per hour, the mechanism stands just over twenty-eight feet high, stretches nine feet in length, and shuttles through a four-and-a-half-foot-wide aisle that separates towers holding more than two thousand storage bins.[32] An observation window allows one to witness the spectacle, perhaps the future of print collections everywhere.

The sole tracker of books, the ASRS shifts from shelves to software all order within the collection. In this system, the memory of the librarian is useless; it does not matter whether he knows his Ps and Qs or 800s and 900s. Remembering only book and bin numbers, mapping programs care nothing for how knowledge is organized. This may be a problem: dependent on an electrical grid lit by coal, natural gas, and nuclear power, all books are lost when the system goes down, making the place a temporary morgue.

People who care about the organization of knowledge did not ask for an ASRS. The Marywood administration simply announced its decision to add the system to the Learning Commons. The building design committee, which included no faculty members, anticipated that the announcement would invite "pushback from faculty." Almost a month later, an e-mail exchange between a faculty member and the library director confirmed the possibility of pushback: the professor reported that "some faculty are still heavily focused on using open stacks rather than electronic browsing." Apparently, no one in the administration considered whether faculty members would be interested in how information is stored, accessed, and distributed. Lack of faculty representation may be why the "intellectual heart of campus" does not include the usual features of a learning commons—a tutoring center and a writing center, for example—despite the design committee asserting that each "should have a presence" in the new building.[33]

In advertising the Learning Commons as "far more than a repository for information," the university made revealing claims about physical books. Promoted as an "improved environment for preserving our books," the Commons hides them, undermining the idea that they are intended for use—this in a space built for research collaboration and information sharing. This promotional literature also claims that the ASRS will be "visible in the Atrium in a soundproof glass enclosure that serves as its own living exhibit of tradition transformed by technology." As far as I can tell, tradition—which I take here to mean physical books—has been transformed into a museum piece: buried books are dead books. That a few are available on a few shelves only shows that the physical book has been dismissed to the dust bin. I hear the soundproof room as a metaphor for keeping people from hearing conversations that unfold among books. To celebrate tradition transformed by technology may be ironic at a Catholic institution: the church exists to carry forward intact a two-thousand-year-old body of beliefs and stories.[34]

The same advertising asserts that "books are not dead; they are simply being used differently than they have been throughout history." I wonder: How are they used differently these days? Are they not still being read? I am also assured that the university will "continue to cherish books and to recognize the magic of the age-old experience of reading a book—feeling its weight in your hands, turning its pages, carrying it with you." That Marywood feels it necessary to allay fears that physical books will disappear tells me that it fully believes that they will. Although mindful of sentimental associations attached to the physical book, the university tells me that it must confront the fact that "book circulation" is dropping; in response, inexplicably, the library has started acquiring "more and more digital books." Is the assumption here that people read e-books more often than physical books? If so, why? If ease of access is the answer, why promote a book retrieval system—a *physical* book retrieval system—as "ready access to information, nearly instant results"? A borrowed book, no matter its form, is not necessarily read, of course, but why spend money on a system meant for print books if the argument is that the print book looks more and more like a thing of the past?[35]

What about privacy? Only people with barcoded IDs have access to the collection; those without authorization are denied. No one—students, faculty, people off the street—can simply enter the Learning Commons, pick a book off a shelf, browse its contents, and return it. With a system capable of carefully tracking physical books, all assumptions of privacy disappear. Should a college library not protect the privacy of people who need information about what they may wish to hide: illnesses, addictions, new ideas?

When the Marywood library had stacks, I could move quickly between local history books, tracking a lead from one to another, the next volume sparking a new idea that would then lead to another book. The links mimicked tight ties among people and places that shaped the histories of Scranton and Marywood. But with local history now hidden in bins beyond my reach, a string of searches that took seconds now stretches to minutes. To move from one book to another, I must first submit an electronic request, order what I need, and wait. Librarians tell me to browse online, but when I browsed the "shelf" of *Mining Conditions under the City of Scranton*, I discovered to the title's left *Megatrends for Women*, to its right *Dining Skills: Practical Interventions for the Caregivers of the Eating-Disabled Adult*. Still a work in progress, the virtual bookshelf moved only horizontally—to its own tune, not by call number—and browsing it was not the same as tracking links. I suppose that I could anticipate inspiration—order up the local history bin and wait—but the muses, I've found, often don't come when called.

Still I wondered, what would be in the bin? I asked to see the box where someone had placed the *History of Scranton*. Standing behind the circulation desk, within the soundproof inner sanctum of the ASRS, I found little local history: *Contemporary Piano Literature*, *A Dictionary for the Modern Flutist*, *Cambridge Encyclopedia of Latin America and the Caribbean*, and the two-volume *Guide to Recreation, Leisure, and Travel for the Handicapped*. When I asked a library worker how they ended up in the same bin, he explained that the books had been chosen based on height. The system segregated short and tall books, he explained; it didn't sort by subject, author, or depth of treatment. The ASRS stacked bins from the bottom up: sixteen-inch books farthest down, twelve-inch ones above, and ten-inch and eight-inch volumes on top. My library guide mentioned that before their removal from the old library every book had been measured with a ruler.

■ ■ ■

I first saw the ASRS in action during a tour of the building while it was under construction. As I watched the mechanical arm move precisely back and forth, up and down, I recalled historian Henry Adams, who "haunted" the 1900 Paris Exposition, "aching to absorb knowledge, and helpless to find it."[36] His friend Samuel Langley, a physicist, in guiding him to something meaningful, ignored art and industrial exhibits and led Adams straight to a hall of dynamos. While there, the physicist may have simply seen coal-powered engines, but the historian experienced a "symbol of infinity . . . [H]e began to feel the forty-foot dynamos as a moral force, much as the early Christians felt the Cross" (380). Observing the power and sleekness of the generators, Adams understood that technological leaps in the 1890s had brought humanity into a "new universe which had no common scale of measurement with the old" (381). Having been unable "to find out what he meant" in writing histories, Adams now turned to the dynamo to discover meaning in a world dominated by science, symbolized best in the "mysterious energy" of electricity (382, 383). This revolution of 1900, for him a major break in history, he compared in impact not to 1500 or 1600—eras of Columbus and Copernicus—but to the fracture of "310, when Constantine set up the Cross" (383). Witnessing the latest turn of events, Adams confronted a choice between two attractions: faith in the Virgin and faith in the Dynamo (383). He believed that the Virgin, Venus, the goddess, embodied reproductive force, the "highest energy ever known to man, the creator of four-fifths of his noblest art," but lamented that "this energy was unknown to the American mind," which saw power generated only through machines (385). As I watched the ASRS, I wondered what Adams would make of an American university—dedicated to the Virgin—using a robot to hide books.

Placing machines between people and books is not a new idea. Two years after Adams visited Paris, work crews broke ground to build the New York Public Library, whose technologies divided readers into "intellectual classes." Like many early twentieth-century libraries, the New York Public Library "hid away the books, rendering them accessible only by staff employing the latest technology: telephones, conveyor belts, elevators." Illustrating this, *Scientific American* placed on the cover of its May 1911 issue a library cutaway that reminds me of a coal mine cutaway. The drawing depicts seven layers of stacks connected by elevators that hoist books to a reading room. Completing the system, librarians used order slips and pneumatic tubes to bring books to readers, who also had no assumption of privacy.[37]

Technology does not drive everything in education, but it does drive a lot of things. At what point, though, does a tech revolution undermine its own sources? Will the latest revolution in higher education expand or limit educational opportunities for the majority of people? Will it kill small, nonelite private colleges? Will the drive to reduce the cost of education lead to driving costs up? How will the next generation of teachers and students be educated? Digital resources that are not publicly available in a public space carry price tags that many readers, if not most, cannot afford. What is lost in this?

I wonder whether the ASRS erodes important intangibles that only stacks can offer: a bookish atmosphere, an awareness that there is more to learn than one can absorb, a sense of centuries-long conversations happening nearby. Maybe more, I fear that the system undermines the stability of the book, and not only the physical book. Out of sight, out of mind, long-form reading may wither at Marywood; seeing a physical book, at least, reminds one that there is reading to do. Its materiality nods to the necessity of slow reading, which is not only about paying attention but also about wonder, absorption, and empathy, all of which take time and cannot be downloaded.

■ ■ ■

I joined another campus tour on Columbus Day. An unbroken blue sky stretched over splotches of red, orange, yellow, and green. In front of the Learning Commons, a crew with a small backhoe eased into place a bluestone sidewalk. A cool morning and rumors of a first frost reminded me of winter days ahead.

Our trek began in the Admissions Office. Jen, our guide, a recent graduate, led fifteen of us to the center of the rotunda. In the dome paintings, cloudy to partly cloudy skies dominated. I studied cracks in the *Mural of Christian Education*; gold flakes had fallen from the apex.

"You'd have your liberal arts courses in this building," I heard Jen say.

When we left the Liberal Arts Center, we stepped into sunshine. Most members of the group hailed from outside the region: Long Island, northern and southern New Jersey, Lebanon County. We numbered among us future accountants, physical therapists, and criminal justice folks.

Striding along with another parent, a history teacher compared the Marywood campus to the grounds at LaSalle University, his alma mater. Others recalled construction delays on highways into Scranton. On a minivacation, one family planned an afternoon hike, or maybe apple picking.

We stopped inside the Learning Commons. Jen pointed to the coffee shop and the automated book retrieval system.

"I think it's the coolest," she said. "No more searching stacks."

I expected a comment or a question, but no one said a thing.

"All you need to do is order the book you want," she said.

At a nearby wall, a worker drilled a screw into a half-finished book shelf.

". . . and it's there waiting for you went you get here."

When we visited the chapel, everyone marveled at the space: high ceilings, tall windows, floods of light. Outside, headed for the gym, we stopped in the road to watch a snake writhe across the macadam.

"It's a garter," the history teacher said. "It won't hurt you."

Inside the gym, parents nodded at the weight room, with its high glass walls, rows of equipment, and climbing wall. We could hear someone shooting baskets.

"You can look," Jen said, pointing to the basketball court.

As we crowded at a door, she noted, “It has a running track above.”

People were fascinated, though, with the automated ball retrieval system.

“We have one of those at our gym,” someone said.

We watched a player drop ball after ball into the basket. When the cannon shot the ball back to him, he caught it, and, in one smooth motion, dropped it in for another score. Amused by us, he took longer shots.

“It’s pretty neat how those things work.”

We had the chance to see the bookstore, but no one stepped inside.

Back at the rotunda, I left the tour, wondering how my fellow travelers had seen the place, to them a new world. A few, I imagined, had discovered corners of campus that would orient them later as students. One or two, I hoped, would come here to be unsettled.

Working Home

■ ■ ■

Thence we came forth to rebehold the stars.

DANTE, *Inferno*

A university gathers—in one place—people from many places. Thinking through disciplines that constitute the school's part in passing on what humans have thought, these folks pose questions and debate answers that push forward frontiers of knowing. Those who come and go—graduates, for example—frequently move on to other, often distant places, carrying with them what they have learned, which, I assume, affects how they think and act where they are. These networks of influence are why universities ought to foster vigorous debates about environmental issues, which are ultimately questions of conscience. Without a strong liberal arts component, however, universities will be unable to offer students the tools to ask good environmental questions, let alone to debate answers.

The liberal arts should have a significant say in arguments about the interrelationships of person, place, and planet. Without the multiple, critical, and sometimes contradictory points of view embodied in the liberal arts, easy, bottom-line choices will dominate debates about how to respond to global warming, species extinction, and water pollution, to name a few. If nothing else, the liberal arts analyze the debates themselves to trace the grooves that our thinking sometimes falls into. People who study language notice how rhetorical moves guide discussion. People who study history know how similar conversations evolved in the past. People who study philosophy understand how these debates relate to larger and much longer debates about ideas.

Literature has a central role in these debates, too, because it raises age-old questions about human virtue and vice, the proper conduct of one's life in a fallen world, and the nature and existence of that which transcends the human. It leads us to wrestle with moral, spiritual, and philosophical issues, as other liberal arts disciplines do, but it does so by representing these issues as parts of our ordinary being as individuals. I may glimpse the material world through the sciences, and I might explore human motivation through psychology and the social sciences, but only art offers me novel forms for imagining my better self. As an art, literature gives me worlds so that I might remember and renew my own. It teaches me about the constancy of change, the deceptive nature of appearances, and the influence of the past on the present. The lessons that literature teaches are hard, and hard won, which is why they must be relearned all the time. If we reject these lessons, we run the risk of creating an even coarser, more degraded world.

■ ■ ■

When the anthracite industry fell into decline in the 1920s, out-of-work miners lost the power to purchase the fuel that they lived atop. To weather winters, some burrowed into company lands to retrieve coal. By 1932, many mined enough to sell to urban markets. In Scranton, they hollowed out the ground beneath their own homes; to steal coal they dug through yards, sheds, and basements.[1] By the mid-1930s, illegal mining had become a multimillion-dollar business.

Manifestations of counternarratives, bootleg mines did not often appear on official maps. Off the grid, the openings may have begun as sketches on kitchen tables, and they likely extended underground, one shovelful at a time, based on the miner's experience. A story of unemployment, poverty, and resilience, a bootleg mine challenged the political and economic system that had dominated the coalfields for decades. Returning mining to its earliest days, bootlegging reasserted the power of the miner to control his work. Perhaps more earthshattering, independent mining also defied private property rights in asserting a community right to heat and light.

Bootlegging coal was much more common in the southern anthracite fields than in the middle and northern fields. In southern fields, coal outcropped—surfaced—more often than elsewhere, making it easier to access. A 1937 state survey of the area estimated that thirteen thousand men worked in nearly two thousand bootleg operations that produced 2.4 million tons of anthracite. Bootleggers even built breakers to clean and size coal. Running mainly at night, their trucks brought stolen coal to Baltimore, Philadelphia, and places across New

Jersey; an estimated one thousand trucks per week hauled illegal anthracite into New York City alone. Between 1930 and 1941, independent mining pumped $250 million into local economies, a Depression-era lifeline for scores of towns.[2]

Families usually operated bootleg mines. Most often, three to five men worked the "dog hole" on a cooperative basis, dividing work and cash from sales. In some families, women also shoveled, hauled, and screened coal. Operating on average fewer than eight months, the typical bootleg miner rigged a hand windlass and bucket to lower workers and to raise coal. As the mine deepened, bootleggers sometimes set a car on blocks, wrapped rope on a wheel, and used the engine for power.[3]

Bootlegging may have been more common in the southern anthracite fields, but the practice took hold in Scranton. A 1938 survey of South Side revealed that in the previous five years bootleggers had burrowed about two hundred holes into three different coal veins.[4] Independent miners also operated in other parts of the city. In December 1938, for example, police in North Scranton arrested seven men, charging them with "malicious mischief" and "larceny of coal" because their digging threatened to flood company mines.[5]

A shadow industry, bootlegging was an underground economy in two senses. Pilfering coal not only undermined the operations of mine owners but also challenged the power of labor unions. Bootleggers argued that they were not stealing company coal; they were working to feed their families. In response to charges that they were thieves, independent miners also claimed that "God put this coal here for use. We're using it . . . [I]f they won't mine it, we will." Others asserted, "People had the idea that the coal here . . . belonged to everybody, same as the water."[6]

Bootlegging threatened labor unions, which said little about the practice until the late 1930s. Illegal mining hurt wage and safety gains, union leaders complained. With more men mining independently, the United Mine Workers of America cooperated in 1940 with officials of Philadelphia and Reading Coal and Iron Company to recommend to the state that it close illegal operations and employ out-of-work miners in reforestation efforts. The next year, the state, coal companies, and the union banded together to end bootlegging, which ebbed too not only because of lease agreements between companies and independents but also because men enlisted in the armed forces.[7]

Bootleg operations damaged timberlands, spread mine fires, and caused subsidences. At least one forester blamed bootlegging for destroying woods in the Anthracite Region, pointing out that in the early to mid-1930s maybe a million trees fell to bootleggers, costing property owners—mainly coal companies—

about $2 million. In Centralia, "unmapped bootleg workings" fed oxygen to the mine fire, hampering efforts to extinguish the blaze. When company engineers showed up in 1938 at a South Scranton residence to repair subsidence damage, they discovered the owner removing coal from beneath the house. One South Sider claimed his right to rob coal because a company president had not fulfilled a promise to repair subsidence damage to his home.[8]

Despite company efforts to stop it, bootlegging enjoyed community support. Neighbors understood illegal mining as an "act of desperation," a "purely local response to high unemployment," which in places in the southern fields in 1934 topped 75 percent; rates in the middle and northern fields hovered between 25 and 30 percent. Companies that pursued bootleggers watched helplessly as juries refused to convict.[9] Realizing that bootlegging boosted communities, small business owners, clergy, and public officials openly sympathized with miners. When the police tried to stop independent operations, angry bootleggers rallied shows of force. Although the bootleg industry diminished in significance by 1940, independent miners gained legitimacy in 1953 when Pennsylvania asserted legal power over their mines.[10]

■ ■ ■

Darkness haunts us. In our pursuit of meaning, we structure the void, propping up our attempts to articulate the world beyond us. Taking our energy from times long gone, from the dark and cold below, we make light and heat to guide our way. Just as a miner structures the darkness with every chip at the face, so a poet organizes the darkness with every line on the page. Unsurprisingly, our attempts to organize the world work as well as our attempts to manage the past: eventually our workings collapse on us. Miner, poet, and historian know that their lights shine only so far.

Scranton poet Thomas Blomain describes bootlegging in "Dog Hole."[11] In this poem, a man spends years "secretly" tunneling through his basement floor to access anthracite to heat the South Scranton house (17) where "his family had lived for years" (8). The male homeowner decides to dig long before utility companies—the "they" in line 9—"shut off the power, / the heat, the water, the phone" (9–10). To keep his place, the man must "rob the mine" (3). That he plots with "stolen charts" (12) to dig his "illegal shaft" (35) calls our attention to the separation of surface and subsurface property rights that he violates again and again.

The poem loops back on itself, mimicking the miner's movement in and out of the "hundred foot / black hole," which he cannot help but work and which consumes him (25–26). Line 14—"I imagine him then"—recalls the opening line, "I imagine him plotting"; line 20 repeats "before he got old," which is line 2; line 23 repeats the phrase "at a time"; and in line 30 we hear the man's age, seventy-seven.

Now "alone in the dark, but for the / flickering anthracite glow" (30–31), the miner has dug his own grave in "feeding the coal to his relic stove" (28). The fire he nurtures takes his life when the engulfed house falls on him as "he scraped black heat beneath / the white winter night above" (38–39). Killed by "another grief consuming / him" (37–38), the miner dies because of "calamity" and "injustice."[12] That he tunnels into the earth "like a prisoner tunnelling out" suggests his deepening distress, his eventual entrapment in old age, poverty, and isolation (18). Others know of him only after his "place burned like / kindling one night" (33–34).

The powerful, the "they" who cut off his power, return near the end when we discover that the miner's home had been "officially condemned by concerned / Authorities" (32–33). The line break after "concerned"—a word that points to business and industry—emphasizes the anonymity and power of these "Authorities," a capitalized word here. "They" appears twice in the final stanza, whose three lines make a single sentence. In a casual act of recovery, "they kicked away" (40) remnants of the house, only to be "all very surprised to find / such a dog hole in this day and age" (41–42). The miner himself, note, goes unnoticed; they see only his workspace. Their marvel at the dog hole suggests that they have been forced to question, if only briefly, their assumptions that the past is past, that surfaces are solid.

Like this miner, Scranton long ago lost the attention of the wider world. And as is the case in "Dog Hole," extraction and subsidence narratives perpetuate a vision of the city as a poor place recovering from a rich history. Scrantonians wonder, Can we tell a third story?

Maybe. If we remember that literature is renewal, a place where we enact again and again our deepest concerns, we might revise our narrative. Seeing poets and writers confront problems we all face challenges us to experience our unsettledness in new lights. As a moral act, reading involves us in knotty issues of right and wrong, good and evil. As a political act, it asks us to choose, not always between good and evil, but often between competing goods. And these are usually the hardest choices to make. Because reading is about choice, it confers significant obligations on us: How much of what we read—and thus know—do we bear responsibility for? How accountable are we for accepting or rejecting values implied in what we read? If we make choices while we read, how do those choices shape decisions that we make in dealing with each other? If anything, literature asks us, What would you do? In confronting these questions and working through answers, we discover ourselves anew.

Would you condemn the bootlegger?

■ ■ ■

Writing about his 1894 tour of a West Scranton coal mine, Stephen Crane recalls his constant awareness of the roof, which he refuses to touch because it "expresse[s] . . . the unmeasured, deadly tons above."[13] The tons, however, have been measured; mining engineers know their dimensions and distances from the surface. In fact, Crane's guide is likely a member of a survey crew: the man knows "all the tangled passages" (206) that make up the "extraordinary, black puzzle" of the mine (205), and, unlike the writer, he has not "lost all ideas of time, direction, distance" (205), including where in "this city of endless night" he is in relation to surface sites (206). When they stop at the face, the guide tells the miner at work there that he cannot measure the place because he does not have his tape; in response, the miner fears that without updated measurements the mine may kill him (204).

The same Pennsylvania mine safety acts that contributed directly to the founding of the International Correspondence Schools also contributed directly to making the anthracite fields a "hotbed of mapping innovation." The 1869 act, which applied only to Schuylkill County, required for the first time that mines be surveyed and that maps be filed twice each year with a state mine inspection office. Five months after this act's passage, a fire at the Avondale colliery, just south of Wilkes-Barre, killed 110 men and boys. The disaster led to a statewide mine safety act in 1870 that required accurate maps to be made on a standard scale—one hundred feet to the inch—and to include not only inclinations of strata but also company boundary lines. A third mine safety act, in 1876, added teeth to the previous laws, levying punishments for not making maps, a stipulation that likely prodded scofflaws to survey their mines.[14]

Maps shifted control of the subsurface from miner to mining engineer. Prior to the 1860s, practical miners of long experience directed underground work.[15] As mining industrialized and mine engineering evolved, maps displaced miners' local, experiential knowledge with a distant, professional knowledge that relied on math and science. Visual displays of this knowledge, maps helped mining engineers to assert authority over underground spaces. The language of maps—their symbols, numbers, and specialized terms—grew more complex as the amount of data they recorded increased. With the advent of blueprinting in the 1890s, engineers and foremen brought maps underground to direct others' work.[16] By this time, a miner like the one in Crane's piece relied on accurate maps to stay alive.

The work of mining engineers connected surface and subsurface. Before underground measurements could commence, a surveyor had to carry below a point of orientation, or meridian. To establish on the surface a true meridian, an "invariable base line,"[17] the surveyor usually used as a fixed point of reference the North Star, which appears twice each day, over North and South Poles. To bring the meridian below, the engineer established a baseline near the mine opening, which he connected to points inside the tunnel or shaft. In a vertical shaft, he would hang wire inside; positioning his transit at the base of the opening, he could then use the wire to establish points of reference inside the tunnel that would be in sync with known surface points. Subsequent survey work further inside the mine depended on the accuracy of points established at the shaft.[18]

A survey crew typically measured angles and distances using three points of reference, called stations. The transit, which measured angles, stood at the center station. Moving in the direction of the survey, a foresight man set up the forward station; a backsight man stood ready at the rear station. For use as a point of sight at a station, the crew hung from the roof a light or a plumb line. Measuring distances between stations required unrolling a steel measurement tape, first introduced in the 1870s by Hazleton-area coal operator Eckley Coxe.[19] As work proceeded, the engineer recorded station numbers, angles, and distances in a notebook, which he would consult later in making a master map.

In one sense, the notebook was more accurate than the map, which was supposed be a "perfect picture" of surface topography, subsurface coal veins, and inside and outside workings. A "record of actual conditions," the notebook included sketches of abandoned workspaces—closed, gobbed, or bratticed openings—that would never appear on a map. The sketches made no pretense to perfection; by their very nature the drawings were only guides, not reproductions. Such sketches might be similar to drawings engineers penciled on scrap paper to create an initial plat of the final map.[20]

■ ■ ■

Digging through the Marywood archives one day, I discovered that the first lecture by a visiting scholar here focused on Dante's *Divine Comedy*. The student newspaper reported of Mr. C. E. Griffiths, "Never, in the course of his reading, did he fail to convey the real meaning of Dante's words."[21] Mr. Griffiths did a much better job than I did, some eighty years later.

In my first semester at Marywood, I taught the *Inferno*, a work that I had never assigned before, in a course that I had no time to prepare, this after having taught literature courses only three previous times. Three. Ever. I scrambled to say something worthy of the epic, scratching on the board "levels of meaning" that other readers had described. Too much. Confused, people stared at me. As a guide, I was little help. I should have, this first time through, followed the poet.

As the poem opens, Virgil finds Dante in midlife in a dark wood, lost. The Roman poet tells the fearful and awed Florentine to follow him and he will lead him to light. To work his way to the heavens, however, the pilgrim must walk with Virgil through the underworld, a place of "heat and frost" (III 87).[22] Along the way, Dante learns how we pay for our blasphemy.

In their travels below, they come to the seventh circle, a region reserved for the violent, a wide plain ablaze with raining fire (XIV 28–29). In this section, canto XIV, the poet explores how human arrogance damages people and the world. Among the dead here, the travelers first encounter Capaneus, a king who challenged Jove (XIV 52–60); Virgil shouts that only the dead man's unrepentant rage can his "pain complete" (XIV 66). As Virgil and Dante move on, keeping off the "burning sand" (XIV 74), they walk the margins, along paths that skirt a wood of suicides. Soon they stop at the banks of Phlegethon, literally "river of fire," a flow of boiling blood that feeds the frozen lake at the bottom of hell. Since coming within the walls of the underworld, Virgil says, nothing has been more "notable" to know than this river (XIV 88). Although Virgil sketches mental maps of its origins and the geography of hell, the pilgrim is still unsure that he stares at the stream that the Roman describes. Dante's inability to orient himself suggests that he has not yet fully grasped interconnections among strata of sin, surface and subsurface, and sufferings of earth and people.

Virgil explains that Phlegethon originates on the surface, in the afflicted figure of an old man. A statue on Mount Ida, the old man of Crete witnesses the agonies of earth and humanity. Whereas before Crete was "chaste" (XIV 96), now the isle is a "wasted land" (XIV 94); Mount Ida, "that once was glad / With waters and with leaves" (XIV 97–98), is now "deserted, as a thing worn out" (XIV 99). A crossroads of suffering, here, within the mountain, Rhea hid from the Titans her infant Jove, a success that brought on war among the gods; here, on Ida's slopes Paris offered the golden apple to Venus, a choice that brought down the walls of Troy. And here now stands a monument of an old man who weeps. Falling through cracks in his body, his tears form the rivers of hell. His head is gold; his arms and chest silver; to his waist, bronze; his legs are of iron;

his right foot, clay. He represents the ages of humanity. Golden Age, Silver Age, and Bronze Age give way to our age, the age of iron. The clay foot reminds us that how we support ourselves may not long bear the weight of our history.

The poet's invention, the statue connects surface and subsurface, life and death. The Italian Dante drew from the Roman Ovid, who drew from the Greek Hesiod, the scheme of successive ages; the Iron Age, Ovid notes, inaugurated surveying and mining: "Wealth . . . buried deep amidst the very Stygian shades, was brought to light, wealth that pricks men on to crime."[23] Standing on a worn and wasted place, watching this mining, the old man of Crete testifies to how unthinkingly we damage ourselves and the earth.

■ ■ ■

Guides to navigating spaces, maps—like literary pieces—help us to know a place. But when most people study them—maps and literary texts—they usually see only surfaces. Few read either to know what lies beneath. As acts of persuasion, mine maps, for example, deepen one's sense of time and space in place. Artful metaphors that seek to persuade readers of their accuracy, mine maps bear marks typical of written texts: words, punctuation, and symbols. Would reading the hidden worlds they represent alter people's perceptions of where they are? I think so.

In drawing a mine map, engineers plat the baseline from a known point in another survey, which is likely platted from a known point in yet another survey, which, in theory, links the new map to all other surveys. On top of a surface map, the engineer lays out blocks of coordinates, uses the surveyor's notebook to plat underground places, and carefully marks each survey station.[24] Typically, he sketches built structures and survey lines in red, and outlines coal beds in separate colors.[25] With each survey, he maps new faces, essentially empty workspaces.

Mine maps are thick with information. If the ones that I have are any indication, local mine maps use dark lines to denote company coal properties, small hatchings around pillars to indicate backfilled mines, and empty boxes to represent solid pillars. The maps record dates of mine permits, underground surveying, abandonment of tracts, sales of coal in place, and street and land patent names. To identify an underground survey station, the maps use a circle, a unique number, and a subsurface elevation number.

Mine maps track elevations and boreholes, which link surface and subsurface. Engineers chart sea-level elevations of coal seams because moving loaded coal cars efficiently depends on minimum grades. After 1902, local surveyors may have calculated elevations from a brass bolt on the Lackawanna County Courthouse that marks mean tidewater elevation at Sandy Hook, New Jersey. Mapmakers also number all boreholes, labeling some flush, others slush. To backfill—flush—an abandoned mine, companies mixed culm and water, which they pump into underground spaces; companies sometimes extinguished mine fires and backfilled seams with slush, a mixture of the water and solid material that breakers produced in washing coal.[26]

Projecting authority, mine maps are—outside US geodetic surveys—among the most accurate maps of the late nineteenth century.[27] Their accuracy even extends to representing what is not there: white spaces between pillars denote removed coal; striped boxes record robbed pillars. But accuracy has limits. Constant use and changes in temperature and moisture can expand or contract a map, disrupting its scale, which would distort work below.[28]

Inaccurate maps threatened lives. In 1891, at Jeansville, a patch near Hazleton, investigators blamed a false map for a flood that drowned seventeen miners; twenty days later, five others were found alive. Improperly redrawing and neglecting to update maps contributed to a dozen deaths in the 1959 Knox mine disaster, which ended deep mining in the northern field. In 2002, nine miners in Quecreek, in southwestern Pennsylvania, nearly lost their lives because of maps that did not record abandoned workings.[29]

In arguing about causes of mine accidents, people naturally used maps, whose accuracy was often contested. Investigation of the June 1896 Twin Shaft disaster, for example, relied on mine maps to determine whether engineers kept pillars aligned vertically between seams. The cave-in occurred where two veins ran close together, one above the other. At a July hearing about the accident, the chief company engineer testified that every week he and his men surveyed the mine, measuring from "old points . . . to survey new workings"; they also "put on the maps the size of pillars," which they measured, once, using a steel tape. He assured investigators that the "map presented . . . is a correct representation of the mine workings, as correct as it can be made" and that the "pillars are shown in the map right over one another, as close as could be secured."[30]

Others were less confident. The August number of *Colliery Engineer and Metal Miner* admitted that the gangways were "wider than usual" but asserted that this was not "radically wrong" and nodded to an accompanying map to show that coal pillars were of "fair size." According to the map, workings in the lower seam were "irregular" but not unusually so; the plat also revealed that "effort was made to keep the pillars in the overlying seams directly over those in the bottom seam," work that was "fairly accomplished."[31]

State investigators read a different story in the maps. Charts they studied showed that not only were some chambers and gangways too wide, but also that "pillars and chambers of the upper vein [were] not all immediately above the lower." In October, they concluded that "some irregularity in the formation of the pillars and chambers of No. 5 vein not being all vertically over those in No. 6 vein, was the original cause of the squeeze."[32] Fifty-eight men died, in part, because of inaccurate measurements.

■ ■ ■

Maps tell a story of the hollowing out of our neighborhood. The three that I obtained from the Office of Surface Mining—maps of the surface and the Clark and Pittston veins—chart the place above and below ground. On each map appears the local street grid; identified by address number, each home is a box drawn in the house's shape. The surface map is easy to read; with lots of white space, it has an uncluttered look. In studying the Clark and Pittston maps, however, it is easy to lose sight of the surface, which gets lost behind what lies below: spills of irregular boxes—columns of coal—wash over surface sites, leaving pillars perched on houses. The three maps also sketch Marywood; the surface map clearly outlines and labels the Liberal Arts Center, but on the Clark map the building appears as a shadowy smudge; on the map of the Pittston vein it stands out as a dark mass. Undermining distinctions between surface and subsurface, appearance and reality, the surface map records four subsidences; two in 1918, in January and April, one in 1934, another in 1943.

Just as the maps overlay one another in space, they also overlay one another in time. Dates record a neighborhood besieged. Stretching across the south side of the Clark map, crews carved out the Dickson workings in the 1870s, 1880s, and 1890s. Controlling the center of each map, Pennsylvania Coal mined the Pittston vein in the 1920s from the east; it cut farther into the neighborhood in the 1930s and '40s. Moving in from the north, Richmond colliery crews mined the Clark vein in the 1910s; they worked through the Pittston vein in the 1920s.

Coal pillars kept surfaces intact. The Clark and Pittston maps trace mine pillars and barrier pillars, which divide company properties. The charts show that Dickson Company miners, who tunneled here before engineers had perfected pillar robbing, left behind solid pillars. In addition to keeping a corridor of columns on each side of a drainage tunnel, Pennsylvania Coal did no pillar robbing under Marywood, St. Joseph's Hospital, the Home of the Friendless, or the Oral School. Everywhere else, in most of the neighborhood, the company took all it could get. The maps note that coal barons with mansions on North Washington

Avenue bought pillars under their homes in 1922; Marywood purchased pillars in 1940. The arrangement of columns under campus shows gangways along which trips of coal cars made the mile and more trek to the breaker; the roads wind their way under the Liberal Arts Center.

Lost among the house boxes, swirls of pillars, and lines of surveys, roads, and company properties sits our home, a tiny box bearing a robbed pillar. Workers flushed the Clark vein under us, but the map does not record the date. The nearest mark of elevation reads 737 feet; the survey station directly below our front yard records an elevation of 597, which means that the coal seam is 140 feet beneath us. Two hundred and fifty feet to the south, mining halted where the vein thinned. To reach the breaker, loads of coal from here climbed four hundred feet to reach the surface, more than a mile east. Maybe a measure of the latest mining, the survey under our house happened in July 1935. Knowing that surfaces shatter, we buy mine subsidence insurance, which, we know, is no guarantee against the void.

■ ■ ■

Under Scranton, humans have threaded their way through the book of nature. In imprinting these measures with our strivings, we have left in the darkness an emptiness that we can never fill. After exhausting each seam, we moved elsewhere, digging, making holes, never resting, boring in bedrock, searching for meaning. That we live as bootleggers in the Anthropocene has been no news here.

Under the nation, from West Virginia to Wyoming, from Texas to North Dakota, we have redoubled our efforts to draw from the earth more fossil fuels, despite overwhelming evidence that their use risks the world. Instead of drafting a new story, one of renewable energy, as other nations have,[33] we have affirmed faith in natural gas. As we burn more, shouldn't we wonder whether our single-mindedness is sane, let alone sustainable? Are we doing the right thing?

We may never recapture a golden age, but we may still create a green one, provided we attend more carefully to what we do. When Dante reaches heaven, he sees interconnections made manifest in the love that binds in a single volume all the leaves that sin has scattered.[34] Embodied in Virgil, one expression of this book—literature—aids us in negotiating moments of fear and confusion and brings us closer to states of bliss, however temporary. A way of knowing who we are, where we are, and what we are doing, literature offers us light and heat, smoothing our journey.

Preface

1. Hamilton, *Mythology*, 308.

2. Gardner, *On Moral Fiction*, 3.

3. Laura Legere, “Tests Set at Kitchen Site,” *Scranton Times-Tribune*, July 30, 2012.

4. *Oxford English Dictionary*, 2nd ed., s.v. “context,” word origin.

5. *Oxford English Dictionary*, 2nd ed., s.v. “measure.”

6. *Oxford English Dictionary*, 2nd ed., s.v. “working.”

7. Foster, *Pocketbook of Principles*, 622. https://books.google.com/books?id=csoJAAAAIAAJ&source=gbs_navlinks_s.

8. Pennsylvania Department of Public Instruction, *Safe Practices*, 111.

9. “UT Arlington Receives First Natural Gas Royalty Check,” press release, University of Texas, Arlington, January 23, 2009, https://www.uta.edu/news/releases/2009/01/gas-check-received.php; “First of Three Gas Wells Goes Online at WVSU Campus,” West Virginia Public Broadcasting, September 8, 2014, http://wvpublic.org/post/first-three-gas-wells-goes-online-wvsu-campus; Shannon Broderick, “The Latest: UW President to Declare Financial Crisis,” *Casper Star-Tribune*, June 15, 2016; Jason Koebler, “Obama: U.S. ‘Saudi Arabia of Natural Gas,’ ” *U.S. News and World Report*, January 26, 2012, http://www.usnews.com/news/articles/2012/01/26/obama-us-saudi-arabia-of-natural-gas.

10. Parini, “Working the Face.” All subsequent references to the poem are cited from this edition by line number.

11. “Slug,” 6b. A slug is also a “temporary type line serving to instruct or identify” (*Merriam-Webster’s Collegiate Dictionary*, 11th ed., s.v. “slug”).

Chapter 1 · Campus as Question

1. Wolensky, Wolensky, and Wolensky, *Knox*, 69.

2. Hitchcock, *History*, vol. 1, 81.

3. “Anthracite Coal Region,” *Aquinas*, January 1916.

4. Michael Iorfino, “Scranton Residents Have Lackawanna County’s Highest Tax Burden,” *Scranton Times-Tribune*, January 30, 2013, http://thetimes-tribune.com/news/scranton-residents-have-lackawanna-county-s-highest-tax-burden-1.1432261.

5. United States, “Scranton.”

6. In 2009–2013, the Scranton poverty rate—20.5%—outpaced county (13.6%), state (13.3%), and national (15.4%) averages (United States, “Scranton”; “Lackawanna County”; “Pennsylvania”). The county unemployment rate in 2014 topped 6.6%, outstripping the state rate, 5.8% (Institute, 13). Median household income in Scranton in 2009–2013 was $38,463, substantially lower than the state average, $52,548 (United States, “Scranton”). In 2013, per capita income in the city—$20,244—fell far below that of the state, $28,502 (United States, “Scranton”). In 2011, child poverty rates in Scranton hit 29% (Steve McConnell, “29% of City Kids in Poverty,” *Scranton Times-Tribune*, September 21, 2012); in Lackawanna County, 17% (Institute, 49). The next year, the county percentage jumped to 22.1%; in 2013, it dropped slightly, to 21.8% (Institute, 49).

7. David Singleton, “DEP Says Hole Is a Mine Void,” *Scranton Times-Tribune*, September 21, 2012.

8. Ruth Tam, “Joe Biden’s Top Scranton Moments,” *Washington Post*, August 23, 2013, https://www.washingtonpost.com/news/the-fix/wp/2013/08/23/joe-bidens-top-scranton-moments. In October 2012, *Saturday Night Live* satirized Biden’s repeated references to Scranton as gritty and blue-collar. See “SNL Scranton.”

9. Chris Hedges, “A Metaphor for America,” *TheWalrus.ca*, November 2012, http://thewalrus.ca/a-metaphor-for-america.

10. James Haggerty, “Casey Fighting for Tanks,” *Scranton Times-Tribune*, June 15, 2011; “laser-guided kits”: Haggerty, “Plant to Cut 50 Jobs,” *Scranton Times-Tribune*, October 23, 2009; “manufactures . . . armor”: Haggerty, “In Face of Cuts, BAE Continues Growth,” *Scranton Times-Tribune*, March 2, 2013; “closed . . . overseas”: David Falchek, “111 Will Lose Jobs at BAE,” *Scranton Times-Tribune*, August 20, 2015; “sprawls across 1,300 acres”: “Facts and Figures,” Tobyhanna Army Depot, April 2016, http://www.tobyhanna.army.mil/about/facts_figures/Facts%20and%20Figures.pdf.

11. Bowen, *Legend*, 6.

12. Wolenksy and Hastie, *Anthracite Labor Wars*, 381.

13. Bowen, *Legend*, 55. References below to Bowen’s poetry are from this volume and are cited by line number.

14. Bowen, *Diamonds of the Mines*, v.

15. “at the face”: Wolensky and Hastie, *Anthracite Labor Wars*, 375; “space made . . . solidity”: Tuan, *Space and Place*, 154; “defines American identity”: Opie, *Virtual America*, ix; “concept . . . literature”: Buell, *Future*, 62; “environmental memory”: LeMenager and Foote, “Sustainable Humanities,” 575.

Echoing many place-based writers, ecologist Mitchell Thomashow declares, “The more familiar you become with the place where you live, the more you’ll come to recognize the importance of the relationship between other places and your own” (*Bringing the Biosphere Home*, 73). A philosopher and an architect who contributed to the anthology *Placing the Academy* tell readers that they teach students that “attentiveness to place is the first step toward caring. And caring is the portal to the moral world” (Kathleen Dean Moore and Erin E. Moore, 30).

16. Lynch, Glotfelty, and Armbruster, *Bioregional Imagination*, 5–6.

17. Heise, *Sense of Place and Sense of Planet*, “nationalism . . . exclusion,” 47; “people must . . . seeing,” 59; “discover . . . places,” 62.

18. Pavel Cenkl, “Reading Climate Change,” 295–311; Libby Robin, “Seasons and Nomads,” 278–294.

19. Buell, *Future*, 67.

20. For discussions of working landscapes, see Cronon, “Trouble with Wilderness”; Hess, “Imagining an Everyday Nature”; and Welling, “Ecoporn.”

21. Morton, *Ecology*, 178.

22. Wolensky and Hastie, *Anthracite Labor Wars*, 386.

23. “Teacher education . . . pillar”: Yarina, *Marywood College*, 20; “1940s . . . Slovak”: 70. Students earned two-year teaching certificates in 1917 (24). Marywood established its four-year teacher education program in 1922 (37–38).

24. “Should voters . . . such as racism”: David D. Kirkpatrick, “A Fight among Catholics over Which Party Best Reflects Church Teachings,” *New York Times*, October 4, 2008,

http://www.nytimes.com/2008/10/05/us/politics/05catholic.html; "stated . . . 'speak for me' ": "Current Comment."

25. Many people have described ways to "green" US college campuses, disciplines, and curricula. For a sampling of approaches, see Sinor and Kaufman, *Placing the Academy*; Martin and Samels, *Sustainable University*; Fassbinder, Nicolla, and Kahn, *Greening the Academy*; and Thomashow, *Nine Elements of a Sustainable Campus*.

26. "fracking . . . on campus": Sydney Brownstone, "Pennsylvania Fracking Law Opens Up Drilling on College Campuses," *Mother Jones*, October 12, 2012, http://www.motherjones.com/politics/2012/10/pennsylvania-fracking-law-opens-drilling-college-campuses; "Ohio . . . similar arrangements": Brownstone; "Tennessee . . . Cumberland Forest": Hollie Deese and Robbie Brown, "University of Tennessee Wins Approval of Hydraulic Fracturing Plan," *New York Times*, March 15, 2013, http://www.nytimes.com/2013/03/16/science/earth/university-of-tennessees-fracking-plan-wins-approval-and-stirs-protests.html?_r=0; "drilling mishaps . . . across the state": Laura Legere, "Gushing Gas Well Forces Evacuation," *Scranton Times-Tribune*, March 15, 2013; Legere, "DEP Probes Blast in Gas-Drilling Region," *Scranton Times-Tribune*, January 3, 2009; Laura Legere, "Bradford, Susquehanna Top Polluters," *Scranton Times-Tribune*, February 14, 2013.

27. "Colleges . . . faculty positions": Nancy Cook, "The Death of the Liberal Arts," *Daily Beast*, April 4, 2010, http://www.newsweek.com/jobs-economy-killing-liberal-arts-education-70405; "In 2010 . . . 'the classics' ": Lisa W. Foderaro, "Budget-Cutting Colleges Bid Some Languages Adieu," *New York Times*, December 12, 2010, http://www.nytimes.com/2010/12/05/education/05languages.html; "In 2011 . . . MFA program": Lauren Ingeno, "English Department Sees Cuts, Changes," *Daily Collegian*, April 1, 2011, http://www.collegian.psu.edu/arts_and_entertainment/article_5fab414d-4d54-58fd-a212-08bd1f995160.html; "fourteen foreign language instructors": Berman, "Real Language Crisis"; "reduced . . . 43 percent": Mitchell, Palacios, and Leachman, "States Are Still Funding"; "In 2012 . . . Spanish": Evan Mah and Nick Sommariva, "College Downsizes Departments, Phases Out Programs, Faculty, Staff," *Emory Wheel*, September 14, 2012, http://emorywheel.com/college-downsizes-departments-phases-out-programs-faculty-staff; "When . . . 'honors programs' ": Ry Rivard, "Exiled in Maine," *Inside Higher Ed*, March 24, 2014, https://www.insidehighered.com/news/2014/03/24/fight-over-layoffs-university-southern-maine-boils-over.

28. "The Associated Press . . . 'good value' ": Justin Pope, "Market Forces Liberal Arts College Evolution," *Scranton Times-Tribune*, December 31, 2012; "disappearing . . . liberal arts": Baker, Baldwin, and Makker, "Where Are They Now?"; "Since 1990 . . . 'broadly defined' ": Pope; "in 2012 . . . their schools": Kevin Kiley, "Changing Their Tone," *Inside Higher Ed*, April 12, 2012, https://www.insidehighered.com/news/2012/04/12/lafayette-conference-focuses-shifting-conversation-about-liberal-arts-value.

29. "In 2011 . . . to land them jobs": Kevin Kiley, "A $10,000 Platform," *Inside Higher Ed*, November 30, 2012, https://www.insidehighered.com/news/2012/11/30/texas-florida-and-wisconsin-governors-see-large-overlap-higher-education-platforms; "The governor . . . in philosophy": Kiley, "Another Liberal Arts Critic," *Inside Higher Ed*, January 30, 2013, https://www.insidehighered.com/news/2013/01/30/north-carolina-governor-joins-chorus-republicans-critical-liberal-arts.

30. Roae and Moul, "House Bill No. 2450."

31. Ibid.

32. Jeremy Fugleberg, "Emails: University of Wyoming Officials Sped Up, Touted Removal of Anti-coal Sculpture," *Casper Star-Tribune*, October 14, 2012, http://trib.com/business/energy/emails-university-of-wyoming-officials-sped-up-touted-removal-of/article_4f9332ee-d83c-5d58-a38b-19e913ba739d.html.

33. The Marywood Alumni Association commissioned the creation of the mace in 1997 to mark the beginning of Marywood as a university ("University Mace," Marywood University, 2013, http://www.marywood.edu/policy/detail.html?id=168750).

34. "Seal of the University," Marywood University, 2013, http://www.marywood.edu/catalog/detail.html?id=d8c5e7f0-b680-4250-a0e9-23c39ff6250b.

Chapter 2 · Wood

1. "Coal cars . . . wooden": Ineson and Ferree, *Anthracite Forest Region*, 18; and Hornor and Tufft, *Mine Timber*, 24; "In 1925 . . . only four": 22; "Oak . . . lumber": United States, *Mine Timber*, 9; "Miners . . . dead work": Wolensky and Hastie, *Anthracite Labor Wars*, 361. The average mine—of all kinds—operated for twelve years (Hornor and Tufft, 25).

2. "To shore . . . small poles": United States, *Mine Timber*, 4; "Miners preferred . . . impending collapse": Ineson and Ferree, *Anthracite Forest Region*, 18; "Although props . . . come apart": Aurand, *Coalcracker Culture*, 63.

3. Defebaugh, *History*, 573. In the late nineteenth and early twentieth century, "large-scale lumbering overshadowed mine-timber operations" (Ineson and Ferree, 19).

4. "In 1887 . . . Potter County": "Peck, Fenwick L," 46; "To transform . . . 'more acres' ": Currin, *Pennsylvania Lumber Museum*, 23, 26, 27; "At nearby . . . area collieries": Coal Department; "By 1898 . . . from Scranton": Birkinbine, "Mine Timbering," 177; "When . . . went south": Currin, *Pennsylvania Lumber Museum*, 27.

5. "In 1905 . . . cubic foot": United States, *Mine Timber*, 9; "By 1921 . . . anthracite": Lippincott, "Where Our Lumber," 42; "The next . . . twenty-five cents": "Big Market"; "Forest Service . . . mine owners": United States, *Mine Timber*, 3; "dealers . . . dwindle": Lippincott, "Where Our Lumber," 43; and "Big Market."

6. "In 1911 . . . eight years": "Delaware, Lackawanna," 63; "tree farms . . . Scotch pine": Delaware and Hudson, *Century of Progress*, 456, 458; "In 1913 . . . program": Ineson and Ferree, *Anthracite Forest Region*, 14; "company sent . . . Lackawanna River": "100 Years Ago," *Forest City News*, April 23, 2014; "After setting . . . trees": "100 Years Ago," *Forest City News*, May 14, 2014; "In 1921 . . . wasteland": "Big Market."

7. Lippincott, "Where Our Lumber," 42.

8. "Big Market."

9. "After . . . energy needs": Maurer and Yu, *Big Ditch*, 180–181; "by 1955 . . . percent": Freese, *Coal*, 161. Between the world wars, much of the cargo from the West Coast consisted of "lumber from the Pacific Northwest and petroleum products from Southern California" (Maurer and Yu, 173). Anthracite production dropped 50% in the period 1918–1938 (Ineson and Ferree, iii).

10. Kay Brownell Reed, e-mail message to author, January 27, 2014.

11. "double . . . sites": Lansing, *Can't You Hear*, 27.

12. "after absorbing . . . logging camps": "Southern Coast of Oregon," *Timberman*, January 1911, https://babel.hathitrust.org/cgi/pt?id=mdp.39015049822086;view=1up;seq=117; "in 1911 . . . his chest": "Henry Conologue [*sic*] Meets Tragic Death in His Logging Camp," *Coos Bay Times*, October, 1911, http://oregonnews.uoregon.edu/lccn/sn85033159

/1911-10-11/ed-1/seq-1/#index=0&rows=20&words=Conologue+Henry&sequence=0&proxtext=Henry+Conologue+&y=16&x=6&dateFilterType=range&page=1; "Three days . . . cemetery": "Many Attend Funeral Here," *Coos Bay Times*, October 13, 1911, http://oregonnews.uoregon.edu./lccn/sn85033159/1911-10-13/ed-1/seq-1/#date1=10%2F13%2F1911&index=0&date2=10%2F13%2F1911&words=&searchType=advanced&sequence=0&lccn=sn85033159&proxdistance=5&rows=20&ortext=&proxtext=&phrasetext=&andtext=&dateFilterType=range&page=1.

13. "Life . . . operations": "I.W.W. Strike Grows," *Ashland Tidings* (OR), May 19, 1913; "loggers . . . wet": Tugwell, "Casual of the Woods," 473; "stronghold": "Lampa Creek Camp," *Coos Bay Times*, May 13, 1913, http://oregonnews.uoregon.edu./lccn/sn85033159/1913-05-13/ed-1/seq-1/#date1=05%2F13%2F1913&index=0&date2=05%2F13%2F1913&words=&searchType=advanced&sequence=0&lccn=sn85033159&proxdistance=5&rows=20&ortext=&proxtext=&phrasetext=&andtext=&dateFilterType=range&page=1; "On May 13 . . . off the job": "I.W.W. Strike Grows"; "Although Wobblies . . . better care": William Robbins, *Hard*, 51. The IWW had only a "scattering membership" at other camps ("Lampa"). In 1913, economic conditions in the timber industry were not very good; by 1916 C. A. Smith Lumber Company was selling timberlands to keep itself afloat (William Robbins, *Hard*, 49). For a photo of the Conlogue brothers' Lampa camp, see Hull, *Coos County*, 52.

14. Rutkow, *American Canopy*, 231–233.

15. "cut spruce . . . cedar": Gerald Williams, "Spruce Production," 7; "military . . . airplanes": Rutkow, *American Canopy*, 230; "Lightweight . . . 'wood' ": Gerald Williams, 3; "Conlogue . . . cut trees": "Portions of Spruce Logs to be Saved," *Evening Herald* (Klamath Falls, OR), March 5, 1918; "By July . . . output": "Southwestern Oregon Camps and Mills," *Timberman*, July 1918, https://babel.hathitrust.org/cgi/pt?id=mdp.39015055268968;view=1up;seq=510; "Although . . . IWW strikes": William Robbins, *American*, 116–117. Camp conditions may have improved during this period because inspectors required private loggers to meet US Army camp standards (Gerald Williams, 5).

16. "New Section Being Opened for Its Spruce Production," *Oregon Daily Journal* (Portland, OR), September 15, 1918, https://www.newspapers.com/image/77162569/; and Beckham, *Stars in the Dark*, 154. The Army intended to put about five hundred men to work in this section in at least ten camps ("New Section").

17. "day after . . . logging": Gerald Williams, "Spruce Production," 9; "they used . . . Coquille": Beckham, *Stars in the Dark*, 155; and Lansing, *Can't You Hear*, 127; "Conlogues . . . coal mine": Beckham, 155. In 1932, the coal in the Klondike "caught fire so the miners pulled the pillars" (154).

18. William Robbins, *Hard*, 36.

19. *Epic of Gilgamesh*, 39, 44. Subsequent references to the epic are cited from this edition by page number.

20. Hamilton, *Mythology*, 113.

21. The connection between Cross and tree comes from Acts 5:30, when Peter, brought before the Sanhedrin for preaching in Christ's name, tells a high priest, "The God of our ancestors raised Jesus, though you had him killed by hanging him on a tree"; in Acts 10:39 Peter tells Cornelius, "They put him to death by hanging him on a tree."

22. *Prose Edda*, 42–43. Subsequent references to the text are cited from this edition by page number.

23. Hennigar, "First Paul Bunyan Story in Print," 176. Bunyan first appeared in print in Michigan in 1906 in the unattributed anecdote "Round River" (176).

24. "fell . . . swing": Rutkow, *American Canopy*, 191; "Pennsylvania, Ohio, and Indiana": 61.

25. "Part missionary . . . Yankee-Pennamite war": Kerrigan, *Johnny Appleseed*, 38; "In 1796 . . . Pennsylvania": 37. In the late eighteenth century, "Planting a cider orchard was not only something that every farmer chose to do; in many circumstances, it was something that every farmer had to do, often before they even constructed their dwellings. Possession of an orchard indicated that land was being settled and productively used" (Rutkow, 57).

26. Morrison, *Beloved*, 6. Subsequent references to the novel are cited from this edition by page number.

27. Hamilton, *Mythology*, 285.

28. Unger, *Nature's Housekeepers*, 98.

29. William Robbins, *Hard*, 36.

30. "As a student . . . human use": Swanger, "Something Akin to a Second Birth," 346, 354; "In 1895 . . . Commonwealth": Rothrock, *Annual*, 34; "Twenty years . . . 'mining ceases' ": Rothrock, *Areas*, 3–4; "practiced medicine in Wilkes-Barre": Swanger, 344.

31. "Echoing . . . thirty years": Rothrock, *Areas*, 22; " 'inexhaustible' . . . approaching": 5, 6; "non-restorable": 25; "It . . . bark": Rutkow, *American Canopy*, 195; "nature . . . 'reforestation' ": Rothrock, *Areas*, 19.

32. C. B. Penman, "Activities of Women," *Scranton Republican*, September 30, 1916.

33. J. B. Dimmick, C. S. Weston, and R. W. Archbald, "Plant Trees, Urges City Commission," *Scranton Republican*, September 21, 1916.

34. Gilman, *Herland*, 4. Subsequent references to the novel are cited from this edition by page number.

35. Wilson, "Charlotte Perkins Gilman's Steady Burghers," 173.

36. "first class . . . 'open' ": *Marywood Chronicle*, 3; "admir[ed] . . . attractions": 493. Immaculata was professor of Education and English (*Marywood Catalog*, 8).

37. Keenan, *Sisters, Servants*, 61.

38. "Forever Green." Marywood alumni remember the trees. Writing in 1976, Sr. M. Matthew O'Connor recalls, "The trees, the trees of learning or the evergreens, the Marywood girls would remember the trees and so much else" (20).

39. Darwin, *Origin of Species*.

40. Pietsch, *Trees of Life*, 87. Pietsch gives examples of the tree used to make information sensible.

41. "workers . . . breaker boys": Aurand, *Coalcracker Culture*, 92; "Unlike in free towns . . . 'purpose' ": 24–25.

42. "Edgerton . . . ran out": Krenitsky, *Edgerton*, 27; "in 1936 . . . 1910–1914": Roe, "Underwood," 4, 6; "model town": Aurand, *Coalcracker Culture*, 27; "consisted of . . . three hundred workers": Roe, 5–6. The Underwood colliery was the first in the Lackawanna Valley to build a breaker with "iron, steel, and poured concrete" (4).

43. Norris, "Life," 241. Subsequent references to the essay are cited from this source by page number.

44. Melonsville is probably the village of Milnesville, which is just outside of Hazleton. Norris likely spelled the name the way he heard it pronounced.

45. Morton, *Ecology*, 89.

46. Miller and Sharpless, *Kingdom of Coal*, 277–278.

47. Ibid., 280.

48. Ibid., 282.

49. Murray, “Pits and Pitfalls,” 29, 32–33.

50. Ibid., 33.

51. Ibid., 34.

52. See Tuan, *Space and Place*, 166.

53. *Dedication*.

54. Berry, *Home*, 17.

55. Ibid., 146.

56. “Mission,” Marywood University, 2015, http://www.marywood.edu/about/mission/index.html?$request.getQueryString().

57. “Arboretum Mission,” Marywood University, 2016, http://www.marywood.edu/arboretum/about/mission.html.

Chapter 3 · Fire

1. “In 1812 . . . could burn”: Miller and Sharpless, *Kingdom of Coal*, 10; “specific skill set”: Sean Adams, *Home Fires*, 40.

2. “Before . . . and Wales”: Miller and Sharpless, *Kingdom of Coal*, 8; “When British ships . . . to anthracite”: Powell, *Fuel Crisis*, 2; “Philadelphia investors . . . foreign competitors”: Miller and Sharpless, 8–9.

3. “mixed results”: Powell, *Fuel Crisis*, 46; “assured a clean environment”: Miller and Sharpless, *Kingdom of Coal*, 16.

4. Powell, *Fuel Crisis*, 49.

5. Freese, *Coal*, 117.

6. Sean Adams, *Home Fires*, 59, 71.

7. Ineson and Ferree, *Anthracite Forest Region*, 11.

8. *Legacy*, 46.

9. “As part . . . forest fires”: ibid., 47; “The two-reel picture . . . his life”: “Forest Fire Pictures,” *Wellsboro Gazette*, November 22, 1916, https://www.newspapers.com/image/37149325; “released . . . *Forest*”: *Legacy*, 47.

10. Ineson and Ferree, *Anthracite Forest Region*, 9. “[Forestry] Department reports in 1922 indicate that there was widespread settling and subsidence of large areas in the anthracite coal region as mine props rotted and collapsed in abandoned mines. Forest areas were destroyed by the settling in some case. There were frequent fires to be dealt with by the department, and conflicts with the coal companies who wanted protection from fire but questioned the necessity of anticipating collapsed mines or replanting trees on the abandoned areas. The forestry department gave the area special attention for fire protection and urged that trees be planted by the companies, ‘realizing,’ as Stuart said, ‘that there will be some losses’ ” (*Legacy*, 64).

11. Hesiod, *Theogony*, 71–73.

12. Ovid, *Metamorphoses*, 1:82–87.

13. Aeschylus, *Prometheus Bound*, 67, 83, 87.

14. Hesiod, *Theogony*, 68–69.

15. Aeschylus, *Prometheus Bound*, 127.

16. “lock away . . . CO2 production”: Rutkow, *American Canopy*, 342; “staggering . . . emissions”: Rutkow, *American Canopy*, 336; “Burnings . . . total”: Graham, “Global Fire Monitoring.”

17. Karl Ritter, Seth Borenstein, and Sylvie Corbet, “Climate Pact Ok’d,” *Scranton Sunday Times*, December 13, 2015.

18. Paul Chapman, “Entire Nation of Kiribati to Be Relocated over Rising Sea Level Threat,” *Telegraph*, March 7, 2012, http://www.telegraph.co.uk/news/worldnews/australiaandthepacific/kiribati/9127576/Entire-nation-of-Kiribati-to-be-relocated-over-rising-sea-level-threat.html.

19. Stacey Plaisance, “Katrina Victims Take on Hurricane Tour Operators,” *Huffington Post*, October 4, 2012, https://www.yahoo.com/news/katrina-victims-hurricane-tour-operators-092612031.html.

20. “NASA Finds 2013 Sustained Long-Term Climate Warming Trend,” National Aeronautics and Space Administration, January 21, 2014, https://www.nasa.gov/content/goddard/nasa-finds-2013-sustained-long-term-climate-warming-trend/#.V2wr9_krKM8.

21. Oreskes, “Scientific Consensus on Climate Change,” 116.

22. Powell, *Fuel Crisis*, 2. “According to Alfred D. Chandler Jr., a modern economic historian, Pennsylvania anthracite caused the origins of the Industrial Revolution in the United States” (2).

23. “Coal ignites . . . ablaze”: Kim, “Greenhouse Gases,” 2; “one fire . . . years”: Tietz, “Centralia Coal Fire,” 48; “mine fires . . . flaring up”: Michalski, “Jharia Mine Fire Control,” 88.

24. Kim, “Greenhouse Gases,” 13.

25. “wreaked havoc . . . 1902”: Henry Robbins, “City Set on a Furnace,” 277; “one of . . . field”: “Alarmed by Mine Fire,” *Brooklyn Eagle*, August 4, 1909, https://www.newspapers.com/image/53881274/?terms=Alarmed%2Bby%2BMine%2BFire%2C%E2%80%9D%2BBrooklyn%2BEagle%2C; “occasionally . . . some one else”: Henry Robbins, “City Set on a Furnace,” 277.

26. “two hundred . . . with it”: “Property Owners Discuss Mine Fire,” *Scranton Truth*, July 11, 1906; “Owners . . . spreading”: “Estate to Deal with Mine Fire Situation,” *Scranton Truth*, July 12, 1906; “Two years . . . health”: “Unusual Complaint from Carbondale,” *Pittston Gazette*, January 18, 1908, https://www.newspapers.com/image/52389933; “A year later . . . responsibility”: “Alarmed by Mine Fire,” *Brooklyn Eagle*, August 4, 1909; “The city . . . confirmed”: Henry Robbins, “City Set on a Furnace,” 277; “The state . . . nothing”: 278; “in June . . . surface”: “Big Mine Fire Is Again Active,” *Scranton Truth*, June 24, 1910.

27. “In 1913 . . . fire”: “Mine Fire Commission Presents Its Report to the Legislature,” *Scranton Truth*, May 9, 1911; “governor . . . idea”: “Vetoed Mine Fire Bill,” *Pittston Gazette*, July 29, 1913, https://www.newspapers.com/image/51604595; “Not a month . . . ‘burned’ ”: “Falls in Burning Mine,” *Wilkes-Barre Record*, August 19, 1913, https://www.newspapers.com/image/95257633/?terms=%E2%80%9CFalls%2Bin%2BBurning%2BMine%2C%E2%80%9D%2BWilkes-Barre%2BRecord%2C%2B%2C; “surface . . . potatoes”: “Mine Fires Used in Cooking,” *Daily Republican* (Monongahela, PA), February 1, 1915, https://www.newspapers.com/image/53075438/?terms=%E2%80%9CMine%2BFires%2BUse

d%2Bin%2BCooking%2C%E2%80%9D%2BDaily%2BRepublican%2B(Monongahela%2C%2BPA)%2C.

28. "Start Work to Stop Mine Fire," *Scranton Republican*, October 2, 1919.

29. "Mine Fire Shows Renewed Activity," *Scranton Republican*, January 10, 1933.

30. "Christmas Eve . . . 'prop' ": Ben A. Franklin, "Earth-Crack Peril Growing in Coal Areas," *New York Times*, September 29, 1969; "Coal companies . . . success": "160 Families Periled by Mine Fire Fumes," *Scranton Times*, December 11, 1963; "picturesque . . . eruption": "Menaces Giant's Despair," *Wilkes-Barre Record*, April 5, 1922, https://www.newspapers.com/image/94214845/?terms=%E2%80%9CMenaces%2BGiant%E2%80%99s%2BDespair%2C%E2%80%9D%2BWilkes-Barre%2BRecord%2C; "After . . . fight": Erin L. Nissley, "We've Been Trying to Douse Mine Fires since Time Immemorial," *Scranton Times-Tribune*, April 20, 2014; " 'from' . . . burn": "160 Families Periled by Mine Fire Fumes"; "ground . . . faucets": Franklin, "Earth-Crack Peril"; "too expensive to control": Richard D. Lyons, "Coal Companies Leave, Pennsylvania Mine Fires Stay," *New York Times*, September 12, 1970, Mine Fires file, archives of the Lackawanna Historical Society, Scranton, PA.

The W. S. Merwin poem "Burning Mountain" may nod to the Laurel Run fires. The mountain in the poem burns because "of the miner who left his lamp hanging / Lit in the shaft and took the lift, and never / Missed a thing . . ." (12–14).

31. Hesiod, *Theogony*, 69.

32. Hesiod, *Works and Days*, 65.

33. Aeschylus, *Prometheus Bound*, 119.

34. Bulfinch, *Golden Age*, 21–22.

35. Byron, "Prometheus," 796. References to the poem are cited from this edition by line number.

36. "On Memorial . . . Centralia": Quigley, *Day the Earth Caved In*, xix; "worst-case scenario," Nolter and Vice, "Looking Back," 105.

37. "blaze . . . underground": Nolter and Vice, "Looking Back," 102; "broken . . . town": Kroll-Smith and Couch, *Real Disaster*, 43–44.

38. "confused and disorganized": Kroll-Smith and Couch, *Real Disaster*, 135; "Despite knowing . . . barrier failed": Quigley, *Day the Earth Caved In*, 9–13; "In 1971 . . . it out": Kroll-Smith and Couch, *Real Disaster*, 34; "Ten years . . . windows": 54.

39. "Former miners . . . concern": Tietz, "Centralia Coal Fire," 51; "Other . . . region": Kroll-Smith and Couch, *Real Disaster*, 23; "Some . . . ignored it": Quigley, *Day the Earth Caved In*, xix; "treated . . . inconvenience": Tietz, "Centralia Coal Fire," 52.

40. "The situation . . . sinkhole": Quigley, *Day the Earth Caved In*, xiv; and Kroll-Smith and Couch, *Real Disaster*, 3; "Clinging . . . surface": Tietz, "Centralia Coal Fire," 50; "With carbon . . . killed him": Kroll-Smith and Couch, *Real Disaster*, 55; "state . . . 'canaries' ": Tietz, "Centralia Coal Fire," 50.

"Those forty-five seconds Todd spent inside the cave-in shook the town like a minor earthquake, jolting residents out of nineteen years of paralysis and denial" (Quigley, xxvi).

41. "About half . . . 'threatened' ": Kroll-Smith and Couch, *Real Disaster*, 56–57; "When . . . whiners": 44, 45, 48.

42. Ibid., 3

43. Ibid., 143.

44. “Slow . . . families”: ibid., 152, 156; “In 1992 . . . in all”: Tietz, “Centralia Coal Fire,” 53–54; “In 2013 . . . homes”: Michael Rubinkam, “Holdouts Win in Centralia,” *Scranton Times-Tribune*, November 1, 2013.

45. “macabre tourist attraction”: Rubinkam, “Holdouts Win in Centralia”; “The *Toronto Star* . . . ‘to Florida’ ”: Tietz, “Centralia Coal Fire,” 50; “As late . . . ‘fire zone’ ”: Tietz, “Centralia Coal Fire,” 56; “walking . . . or death”: “Centralia Mine Fire Resources,” Pennsylvania Department of Environmental Protection, 2015, http://www.dep.pa.gov/Business/Land/Mining/AbandonedMineReclamation/Centralia/Pages/default.aspx; and see Tietz, “Centralia Coal Fire,” 56.

46. “In Lackawanna County . . . sixteen thousand”: Munley, *West Side*, 1; “In Scranton . . . South Side”: Gar Kearney, “Cedar Ave. Mine Fire ‘Dig Out’ to Cost $5.5 Million,” *Scranton Times*, December 16, 1966; “according to . . . ‘gone’ ”: Lyons, “Coal Companies Leave.”

47. “Discovered . . . in December”: “$1.5 Million,” undated newspaper article, Cedar Avenue Mine Fire file, archives of Lackawanna Historical Society, Scranton, PA; and see Lyons, “Coal Companies Leave”; “The burning . . . New County”: Kearney, “Cedar Ave. Mine Fire”; “During . . . surface”: Bill Gummer, “South Side Menace—a Year Later,” *Scrantonian*, November 19, 1967.

48. “In September . . . homes”: “$1.5 Million”; “In November . . . meetings”: Gummer, “South Side Menace.”

49. “Unlike . . . control”: Kearney, “Cedar Ave. Mine Fire”; and see Gummer, “South Side Menace”; “With ‘millions . . . air currents’ ”: “$1.5 Million”; “To contain . . . ‘wide’ ”: Franklin, “Earth-Crack Peril.”

50. “Quickly . . . October”: Gummer, “South Side Menace”; “After . . . the fire”: “$1.5 Million”; “blasts . . . homes”: Lyons, “Coal Companies Leave”; “Within . . . return home”: Gummer.

51. “Officials . . . 1970”: “Cedar Avenue Mine Fire Battle Ends,” *Scranton Times*, August 8, 1970; “The effort . . . million”: “It Cost $5.3-Million to Put Out the Cedar Avenue Mine Fire,” *Scrantonian*, August 9, 1970; “largest . . . United States”: “$1.5 Million”; “Unlike . . . budget”: “It Cost”; “The public . . . ‘mining’ ”: Lyons, “Coal Companies Leave.”

52. “culm pile . . . years”: Franklin, “Earth-Crack Peril”; “To fight . . . cracks”: Nissley, “We’ve Been Trying.”

53. Franklin, “Earth-Crack Peril.”

54. “in 1900 . . . pile”: “Overcome by Fumes from Culm,” *Philadelphia Times*, April 12, 1900, https://www.newspapers.com/image/52571499/?terms=%E2%80%9COvercome%2Bby%2BFumes%2Bfrom%2BCulm%2C%E2%80%9D%2BPhiladelphia%2BTimes%2C; “In 1905 . . . asphyxiation”: “He Was Asphyxiated,” *Scranton Republican*, October 15, 1905; “In 1918 . . . a man”: *Scranton Times Annual*, 10; “the next year . . . Olyphant”: “Culm Bank Victim Has Been Identified,” *Scranton Republican*, July 5, 1919.

55. “Marvine Fire Project Launched with Fanfare,” *Scranton Tribune*, July 23, 1968, Mine Fires file, archives of the Lackawanna Historical Society, Scranton, PA. Making *The Molly Maguires* saved Eckley from destruction. Without the film, the town likely would have been leveled as part of a strip mining operation; today it’s a museum (Blatz, 32). Descendants of mine workers who lived in the patch reside in original company houses.

56. “billowing . . . 2013”: Brendan Gibbons and Kathleen Bolus, “Coal, Culm Fires Burn in the Upvalley,” *Scranton Times-Tribune*, January 22, 2014; “The Fell fire . . . the

area”: Brendan Gibbons, “Land on Fire, Still,” *Scranton Times-Tribune,* February 28, 2014; “The Fell fire . . . discovery”: Brendan Gibbons, “No End in Sight for Culm Fire,” *Scranton Times-Tribune,* March 27, 2014; “After . . . $2 million”: Brendan Gibbons and Joseph Kohut, “State: Fell Culm Fire Out,” *Scranton Times-Tribune,* May 22, 2014.

57. “Funds . . . industry”: Brendan Gibbons, “Long Time Burning: Mine Fires Widespread, Hard to Douse,” *Scranton Times-Tribune,* May 31, 2014; “in 2005 . . . mine fires”: Kim, “Greenhouse Gases,” 2; “In 2014 . . . Counties”: Brendan Gibbons, “Scorched Earth,” *Scranton Times-Tribune,* January 24, 2014; “Unless . . . 2021”: Gibbons, “Long Time.” On March 3, 2014, the federal Office of Surface Mining Reclamation and Enforcement announced that it would fund nine projects in Lackawanna and Luzerne Counties that would reclaim mine land, fill abandoned strip pits, and extinguish the Powderly mine fire in Carbondale (Brendan Gibbons, “NEPA Due Millions to Revive Mine Sites,” *Scranton Times-Tribune,* March 3, 2014).

58. Keenan, *Sisters, Servants,* 104.

59. J. Rossa McCormick to Thomas O’Reilly, September 13, 1932.

60. J. Rossa McCormick to Thomas O’Reilly, September 15, 1932.

61. The “ ‘nauseating’ . . . from campus”: ibid.: “In the end . . . Pennsylvania Coal”: L. C. Brunswick to Josepha Hurley, December 19, 1932; “Had . . . trouble”: McCormick to Thomas O’Reilly, September 15, 1932.

62. Bell, “Mine Condition Report.”

63. Flushing means to backfill a mine with coal waste, or culm, mainly fine coal, rock, and slate. “In controlled . . . workings”: “Care Taken on Projects,” undated newspaper article, Mine Fires file, archives of Lackawanna Historical Society, Scranton, PA; “After crews . . . the blaze”: Bell, *Mine Condition Report.*

64. “In Jharia . . . people”: Michalski, “Jharia Mine Fire Control,” 83; “In Indonesia . . . drought”: Andrew C. Revkin, “Underground Fires Menace Land and Climate,” *New York Times,* January 15, 2002, http://www.nytimes.com/2002/01/15/science/15FIRE.html?pagewanted=all; “coal . . . ‘CO2’ ”: Kim, “Greenhouse Gases,” 1.

65. “In April . . . Krakatoa”: Evans, “Blast from the Past”; “Mount Tambora . . . Bali and China”: Cao, Li, and Yang. “Mt. Tambora,” 588–589, 595, 599; “ten thousand instantly” and “weeks . . . followed”: Evans, “Blast from the Past.”

66. Mary Shelley, introduction to *Frankenstein,* vi–viii. Percy Shelley and Mary Godwin married in December 1816.

67. Shelley, *Frankenstein,* 30. Subsequent references to the novel are cited from this edition by page number.

Chapter 4 · In the Gaps

1. Linda Farrar, “China Bans 7 Topics in University Classrooms,” *Chronicle of Higher Education,* May 20, 2013, http://chronicle.com/article/China-Bans-7-Topics-in/139407.

2. Daniel Burnett, “Four Score and an ‘F,’ ” *Scranton Times-Tribune,* November 19, 2013.

3. Emil Kackos, letter to the editor, *Scranton Times-Tribune,* December 3, 2013.

4. Douglass, *Narrative of the Life,* 63. Subsequent references to the *Narrative* are cited from this edition by page number.

5. McFeely, *Frederick Douglass,* 143–144.

6. “Thirty million . . . we value”: “Demographics”; “a language . . . we know it”: Berry, “In Defense,” 172; “precise . . . stories”: 173.

7. Kilcullen, "Value of a College Education." Subsequent references to this presentation are from this source.

8. Obama, "Remarks by the President in the State of the Union Address." Subsequent references to this speech are from this source.

9. Conrad, *Heart of Darkness*, 7. Subsequent references to the novel are cited from this edition by page number.

10. Marlow often remarks that he is unsure of what his experiences meant. For example, at the Central Station, a clearinghouse for pillaging the countryside, Marlow acknowledges, "I asked myself sometimes what it all meant" (Conrad, 23).

11. Achebe, "Image," 176.

12. Jackson, "Serious Challenge of Our Time," 2–3.

13. "homecoming major . . . in scope": Jackson, *Becoming Native*, 3; "our emerging . . . native": 97.

14. "With ecology . . . they are": Jackson, "Why Does McPherson College"; "massive . . . before us": *Becoming Native*, 103; "society . . . become": "Why Does McPherson College."

15. Berry, "Major," 34–35.

16. Ibid., 33.

17. "Promising . . . $203,780": City of Scranton, "2013 Operating Budget," 2, 7; "Tensions . . . the site": Jim Lockwood, "Judge: College Can Raze Building," *Scranton Times-Tribune*, August 10, 2013. The PILOT line in the 2012 budget was $183,250.

18. "Possible examples . . . responsibility": Nussbaum, *Not for Profit*, 55; "The thing . . . culture": Berry, *Home*, 77.

19. "ICS opened . . . 'trades' ": Knies, "International Correspondence Schools"; "largest . . . world": Watkinson, "Education for Success," 348.

20. *Advertising Proofs*.

21. "Parade of Thousands of Children Proves Delight," *Scranton Times*, October 3, 1916.

22. Ibid.

23. "The day . . . 'Liberty' ": "I.C.S. Will Also Have Anniversary," *Scranton Republican*, October 2, 1916; "Advocating . . . the 'poor' ": "I.C.S. Fieldmen Are in Convention Here," *Scranton Times*, October 3, 1916; "presented . . . before": Conwell, *Acres*, 165. Subsequent references to Conwell's speech are cited from this edition by page number.

24. "Temple . . . 'Perseverance Conquers' "; "Acres of Diamonds," Temple University, 2012–2013, https://www.temple.edu/about/history/acres-diamonds; "Temple . . . 'at night' ": "History," Temple University, 2012–2013, https://www.temple.edu/about/history; "university requires . . . 'region' ": "Philadelphia Experience," Temple University, 2013, https://gened.temple.edu/pex; "The course . . . 'laborers' ": "PEX Courses," Temple University, 2013, http://gened.temple.edu/pex/pex-courses.

25. "Browse by Country," African Sisters Education Collaborative, 2015, http://www.asec-sldi.org/countries.

26. Achebe, *Things Fall Apart*, 116. Subsequent references to the novel are cited from this edition by page number.

27. JanMohamed, "Sophisticated Primitivism," 583.

28. She tells, for example, the story of a "quarrel between Earth and Sky," a story of drought and flood, a story that echoes stories told round the world (Achebe, *Things Fall Apart*, 33). Okonkwo's second wife, Ekwefi tells a tale of the trickster figure Tortoise, who deceives with his "sweet tongue" a chorus of birds who have been invited to a feast in the

sky (58). Renaming himself *All of You,* Tortoise passes himself off as a king, gorges himself while the birds go hungry, and falls to earth, breaking his shell (59–60).

29. "thoroughgoing racist": Achebe, "Image," 176; "always surprised": 169; "alternative frame of reference": 175; "savage" and "wild-eyed": Conrad, *Heart of Darkness*, 60; "great work of art": Achebe, 176; "casual visitor . . . tooth": 181.

Chapter 5 · Body Language

1. "Just after . . . slope": "Price-Pancoast," 618; and "Anthracite," *1911*, 26; "whether from . . . side tunnel": "Price-Pancoast," 618; and "Anthracite," *1911*, 24; "Someone . . . vein": "Price-Pancoast," 618. To define the magnitude of the disaster, news accounts of the fire invoked the memory of Avondale, the 1869 fire that killed 110 men and boys (Ellis Roberts, *Breaker,* 12). The *Scranton Times*, for example, led its April 8 editorial with, "The most appalling catastrophe in the history of mining in the Lackawanna valley, and second only to one—that of Avondale—recorded in the anthracite region, is that which occurred at the Pancoast workings of the Scranton Coal company at Throop" ("Trapped to Death," *Scranton Times*, April 8, 1911).

2. "Those fighting . . . arrived above": "Twenty-Nine Bodies Recovered from Blind Tunnel of China Vein in Pancoast Mine in Throop—Rescuers Still Removing Bodies," *Scranton Tribune-Republican*, April 8, 1911; "Seeing . . . 4:00 p.m.": "Price-Pancoast," 618; "Meanwhile . . . gathered": "Still Scouring Tunnel of Death for More Bodies," *Scranton Times*, April 8, 1911.

3. "US . . . . disasters": "Historical"; "all issues . . . year": "Anthracite," *1911*, 3.

4. "Raitz . . . fumes": "Probing Disaster at Pancoast; Cause of Fire as Yet Unknown," *Scranton Times*, April 10, 1911; "recovery crews . . . starting up": "Pancoast Deaths 74," *New York Times*, April 10, 1911; "The coroner's . . . 'judgment' ": "Anthracite," *1911*, 31, 30; "mine kept . . . priorities": "Want State Aid for Destitute of Pancoast Fire," *Scranton Times*, April 10, 1911. On April 10, 1911, the *Scranton Times* asserted that two hours passed after the fire's discovery before officials ordered the miners from the mine ("Two Things to Explain" *Scranton Times*, April 10, 1911).

5. "every man . . . and necks": "Still Scouring"; "Farthest in . . . he fell": "Twenty-Nine"; "stories . . . undertakers": "Total of Pancoast Dead Is Seventy-Three—Governor John K. Tener to Start State Investigation—Relief Fund Reaches Thousands," *Scranton Tribune-Republican*, April 10, 1911.

6. "behaving . . . 'at it' ": "Total"; "Asked . . . 'the part' ": "Still Scouring."

7. " 'unseemly' and 'gruesome' ": "Taking Aaway [*sic*] the Dead in Ambulances and Undertakers' Wagons," *Scranton Tribune-Republican*, April 10, 1911; "The grief-stricken . . . pleadings": "Still Scouring"; "An undertaker's . . . 'driver' ": "Total." The undertakers' behavior may not have been unusual. The *Tribune-Republican* noted that "there was the usual unseemly scrambling of undertakers for the job of taking away the dead. It was too gruesome to depict" ("Taking Aaway").

8. "impersonal . . . gashed": Witt, *Accidental Republic*, 26–27; "strenuous . . . strife": Roosevelt, "Strenuous Life," 3; "goal . . . greatness": 22; "founding in 1910": "100 Years in Review, 1910–2010," Boy Scouts of America, 2011, http://www.scouting.org/filestore/pdf/210-031_WB.pdf; "anthropologists . . . characteristics": Gould, *Mismeasure,* 127; " 'better' . . . poor": Bender, "Perils of Degeneration," 5; "eugenics craze": Hofstadter, *Social Darwinism*, 162; "states . . . 1915": 167.

9. Norris, *McTeague,* 6. Subsequent references to the novel are cited from this edition by page number.

10. "description from . . . degeneration": Pizer, "Genesis of *McTeague,*" 66; "crime . . . animals": Gould, *Mismeasure,* 125. Norris based *McTeague* on a San Francisco murder (reported October 3, 1893). A laborer named Collins murdered his wife in a kindergarten cloakroom after she refused to give him money; news accounts labeled Collins a "drunken brute" who felt no remorse (Pizer, 63).

11. Patricia Cohen, "Next Big Thing in English: Knowing They Know That You Know," *New York Times,* April 1, 2010.

12. "Japanese . . . 'strength' ": Schnabel et al., *Miles of Mules,* 43. "Labor constituted about 75 percent of the operating cost of a typical anthracite enterprise" (Wolensky, Wolensky, Wolensky, *Knox,* 106).

13. Deborah Brandt Johnson, "The Histories of Penn State: Keeping a Community's Needs in Full View," *Penn State Intercom,* February 21, 2002, http://www.psu.edu/ur/archives/intercom_2002/Feb21/history.html.

14. "After shooting . . . 'hay' ": Crane, "Lone Charge," 49; "endless . . . war": Crane, "In the Depths," 195, 205. In 1890, accidents killed three hundred of every one hundred thousand anthracite miners (Witt, *Accidental Republic,* 27).

15. Crane, "In the Depths," 206–207. Subsequent references to the essay are cited from this version by page number.

16. "Total."

17. "The engine . . . opening": "Probing Disaster"; "model of safety": "Total"; "It is . . . a lamp": "Probing Disaster"; "the habit . . . in it": "Anthracite," *1911,* 19; "48 . . . victims": *Reports,* 666.

Deserved or not, miners had a reputation for carelessness. Usually working alone or in pairs, they valued their independence and chafed at workplace safety regulations; they especially didn't appreciate the increased levels of supervision that new, Progressive-era mine safety rules demanded (Graebner, *Coal-Mining Safety,* 112). The Pancoast disaster was on Roderick's mind when he wrote the annual report for 1912: "The question of the safety of mines and protection of employes [*sic*], along with first aid training, took a prominent place among the incidents of the year" ("Anthracite," *1912,* 5). The report focuses first on workmen's compensation (6–10), English language and safety education (10–13), and the use of electric lamps in mines (13–18).

18. Howard Berkes, "Officials: W. Va. Mine Operator Kept Two Sets of Safety Records," *National Public Radio,* June 29, 2011, http://www.npr.org/sections/thetwo-way/2011/06/29/137493009/w-va-mine-operator-kept-two-sets-of-safety-records-investigators-say.

19. "twenty deaths . . . 'few": Harvey and Smith, *History of Wilkes-Barre,* 84; "many . . . material": title page; "between 1870 . . . died": Wolensky, Wolensky, and Wolensky, *Knox,* 84.

20. "On March 31 . . . 'undertaker' ": Edward J. Gerrity, "13 Died in 1st Major Disaster," *Scranton Sunday Times,* March 31, 1968; "In December . . . wits gone": "Thirteen Miners Killed," *Scranton Times,* December 9, 1914. Another possible cause of the 1914 mishap: the carriage may have been too weak to support the weight of the men.

21. "Probing Disaster." The list below is from "Anthracite," *1911,* 173–178.

22. Worthen, *D. H. Lawrence,* ix, 12.

23. Lawrence, "Odor of Chrysanthemums," 1729, 1732. Subsequent references to the short story are cited from this edition by page number.

24. "St. Joseph's . . . 'deserted orphans' ": "History," St. Joseph's Center, 2007, https://www.stjosephscenter.org/about/history/; "reaped . . . grizzly bear": "Charity Ball Tickets," *Scranton Times*, April 24, 1911, "Charity Ball Dance Program Announced," *Scranton Times*, April 15, 1911; and "Social and Personal," *Scranton Tribune-Republican*, April 18, 1911. The first St. Joseph's charity ball was held March 31, 1902.

25. Knowles, *Wicked Waltz*, 61, 63, 65, 66.

26. Ibid., 97, 98.

27. "The 1910 . . . area": "Population by Counties," 456; "colliery manager . . . Poles": *Reports*, 593. In 1911, the US Immigration Commission reported that in one representative anthracite colliery "the general occupations and the races employed therein may be briefly stated, as follows: Managers and superintendents, Welsh; foremen and bosses, Irish; contract miners, Poles and Lithuanians; inside laborers, Slovaks, and more recent Poles and Lithuanians, and Italians" (*Reports*, 593). Priceburg is now part of Dickson City.

28. "Widely cited": Barendse, *Social Expectations*, 31; "the term Sclav": Peter Roberts, *Anthracite Coal Communities*. Subsequent references to the study are cited from this edition by page number. I use Roberts's spelling of Slav only when I quote him.

29. "in 2006 . . . unconstitutional": Jon Hurdle, "Judge Strikes Down Town's Immigration Law," *New York Times*, July 26, 2007, http://www.nytimes.com/2007/07/26/us/26cnd-hazleton.html; "Many people . . . death": Sean D. Hamill, "Mexican's Death Bares a Town's Ethnic Tension," *New York Times*, August 5, 2008, http://www.nytimes.com/2008/08/05/us/05attack.html.

30. "Anthracite mine . . . fatal mine accidents": Graebner, *Coal-Mining Safety*, 112; and Fishback and Kantor, "Adoption of Workers' Compensation," 315; "In his 1911 . . . 'English language' "; "Anthracite," *1911*, 7; " 'English First' . . . and industry": Graebner, *Coal-Mining Safety*, 122. The Anthracite Heritage Museum displays an example of a multilanguage safety sign.

31. "education . . . indistinguishable": Graebner, *Coal-Mining Safety*, 122; "coal-region immigrants . . . 'Americans' ": Maclean, "Life in the Pennsylvania Coal Fields," 351; "which sought . . . language": Dague and Phillips, *Mine Accidents*, 5. The subtitle of *Mine Accidents and Their Prevention* notes that the text is "Especially Adapted for the Teaching of English to the Non-English Speaking People." In his book, Peter Roberts further distinguishes between Anglo-Saxons and Slavs by declaring the former "white men" and the latter "foreigners" (*Anthracite Coal Communities*, 106).

32. "which . . . workplace safety": Graebner, *Coal-Mining Safety*, 160; "The reform-minded . . . workplace itself": 162.

33. "the Pancoast fire . . . African Americans": "Deadly Work of Explosion," *Scranton Times*, April 8, 1911; "Arguing . . . workers' compensation": Gompers, "Hostile Employers." For a discussion of the Littleton explosion, see Ward and Rogers, *Convicts*.

34. "Employer liability laws . . . 'warn of danger' ": Schaffer, "History of Pennsylvania's Workmen's Compensation," 31; "The burden . . . *blame me?*": 28; and Skocpol, *Protecting Soldiers and Mothers*, 287. Not until the Casey Act of 1907, "the first major attempt to modify Pennsylvania's liability rules with a statute," did the state define superintendents, managers, and foremen as management, not fellow servants (Schaffer, 31, 32). In

the United States, "the defenses available to the employer were such that only an estimated 15 percent of the injured employees ever recovered damages, even though 70 percent of industrial accidents were estimated to be the result of the nature of the work or of employer negligence" (Weinstein, 157).

35. Fishback and Kantor, "Adoption of Workers' Compensation," 318.

36. Higgens-Evenson, "From Industrial Police," 377. James Weinstein believes that workers' compensation was a way for big business to blunt the labor movement's political power (161). Fishback and Kantor note that "public awareness of workplace accidents during the period increased as shifts in employment across industries led to an increase in the share of workers in more dangerous jobs in manufacturing and mining and as the reporting of accident risk increased sharply" (315).

37. "New York's . . . 'federal constitutions' ": Schaffer, "History of Pennsylvania's Workmen's Compensation," 35, see also Weinstein, "Big Business," 170; "Shifting . . . fixed cost": Fishback and Kantor, "Adoption of Workers' Compensation," 305; "no 'revolutionary . . . political support' ": 306; "first widely accepted": Howard, "Workers' Compensation, Federalism," 28; "prepared . . . 'health insurance' ": Fishback and Kantor, 306; "Pennsylvania . . . 1913": Schaffer, 27, 35–36.

38. "May 1910 . . . 'Community' ": Directors, *Report*; "poor and lowly": Gillespie, *Sisters of the I.H.M.*, 355; "a school for Hungarian children": "Minutes of Meeting—June 27, 1899"; "Sr. M. Stella O'Malley . . . the world": Gillespie, 357.

Chapter 6 · On Broken Ground

1. "As crews . . . homes": Ruth Reynolds, "Life amid the Perils of Pittston," *Wilkes-Barre Sunday News*, March 19, 1944; "Soil slides . . . efforts": Kalen Churcher, "Hollow Ground," *Wilkes-Barre Times-Leader*, January 25, 2005; "The shovel . . . 'red coat' ": Reynolds; "In falling . . . visible": Ellis Roberts, *Breaker*, 134; "her body . . . 'her face' ": Churcher; "Official . . . strangulation": Reynolds.

2. "rail[ed] against coal operators": Ellis Roberts, *Breaker*, 134; "that night . . . 'would happen' ": Reynolds, "Life amid the Perils of Pittston."

3. "A month . . . 'into the earth' ": Ellis Roberts, "History," 38; "In July 1942 . . . free": 21; "In October 1943 . . . eight feet": 29; "In the same year . . . the street": Reynolds, "Life amid the Perils of Pittston"; "Two years . . . deep": 43. The day after Jule Ann died the same ground gave in (Ellis Roberts, "History," 36).

4. Bulfinch, *Golden Age*, 229.

5. Ovid, *Metamorphoses*, vol. 2, book 10, 4–5. Subsequent references to the story are cited from this edition by line number.

6. Ovid, *Metamorphoses*, vol. 2, book 11, 1–2. Subsequent references to the story are cited from this edition by line number.

7. Baker, *Architectural*, x.

8. "In 1994 . . . 'sinking' ": Rich Mates, "Now Troughs Developing," *Scranton Sunday Times*, January 27, 1994; "in 2012 . . . deep": Denis J. O'Malley, "DEP Plans to Fill Void beneath City Apartments," *Scranton Times-Tribune*, June 5, 2012.

9. "In 2003 . . . 'the place' ": Rich Mates, "Mining Office Filling 19 Holes," *Scranton Times*, March 7, 2003; "A decade . . . 'big ones' ": Elizabeth Skrapits, "NEPA Sinkhole Prone," *Scranton Times-Tribune*, March 5, 2013; "in 2013 . . . Fulmer died": Brendan Gibbons and Elizabeth Skrapits, "DEP to Fill Mine Voids in Luzerne," *Scranton Times-Tribune*,

October 31, 2013; "The contractor . . . fill": Brendan Gibbons, "Mine Subsidence Work Complete," *Scranton Times*-Tribune, November 1, 2014.

10. Metz, *Faith in History*, 109–110. Dangerous memory is a theological concept. I thank Laurie Cassidy for pointing me to it.

11. "In . . . 'to-day' ": Vermeersch, "Modernism," 416; "Responding . . . 'heresy' ": 415; "To quell . . . oath": Woods, *Church Confronts*, 21; "As it moved . . . colleges": 93.

12. "rejected . . . 'the world' ": Woods, *Church Confronts*, 88; "Philosopher . . . systems": 89.

13. "union": Pace, "Education," 303; "The purpose . . . eternal life": Kathleen Cummings, *New Women*, 146; "religion . . . 'subjects' ": Pace, 304.

14. Woods, *Church Confronts*, 6, 92, 109.

15. Pace, "What Is the Purpose of Christian Education?," 284. Subsequent references to the address are cited from this source by page number.

16. "Anthracite Coal Region," *Aquinas*, January 1916.

17. "Contractors . . . motherhouse": Edward F. Blewitt to M. Germaine O'Neill, December 13, 1917; blueprint, Marywood College; "which had . . . campus grounds": Edward F. Blewitt to M. Germaine O'Neill, August 26, 1919; "Seeking . . . support": M. Casimir Murray to A. K. Morris, July 14, 1922; "In response . . . 'conditions' ": A. K. Morris to M. Casimir Murray, July 24, 1922; "LAC . . . August": Keenan, *Sisters, Servants*, 61; "steel . . . columns": Yarina, *Marywood College*, 58.

Planning for the LAC began in 1921; construction took about two years (Keenan, 61).

18. "After a survey . . . 'locality' ": Keenan, *Sisters, Servants*, 61; "in September . . . science hall": O'Connor, "Physical Expansion," 6; "In the same . . . 250 students": Yarina, *Marywood College*, 43; "In 1929 . . . 'and persons' ": Keenan, 79. When IHMs first bought land on the hill, a carriage house, greenhouse, and cottage stood on the grounds (Yarina, 9).

19. Keenan, *Sisters, Servants*, 103–104.

20. "In November . . . subsidiary": "Dunmore Folk Enlist to Halt Reckless Mining," *Scranton Times*, November 9, 1936; "Attendees . . . Green Ridge Terrace group": "Arrest of Pittston Concern Officials Is Demanded by Home Owners in Cave Area," *Scranton Times*, November 13, 1936. A 1933 map in the IHM Archives discusses robbing the pillars.

21. Flushing means to backfill a mine with coal waste, or culm, mainly fine coal, rock, and slate. "subsidence tore . . . this case": "Mine Cave Drops Yard and Driveway; Connolly Says Firm Not Responsible," *Scranton Times*, November 10, 1936; "An engineer . . . 'safe' ": "Dunmore Folk"; "The same night . . . '[two] houses' ": "Mine Cave Drops." Rev. Joseph A. Griffin was appointed campus chaplain in 1932 ("Chronology," time line, Marywood University, 2015, http://www.marywood.edu/history/chronology). A Scranton native and later auxiliary bishop of the diocese, Rev. Henry Klonowski taught in the Classics Department not only at Marywood but also at St. Thomas College; at the same time, he served as chaplain at St. John's Maloney Home for the Aged (Gallagher, 356).

22. H. J. Connolly to William J. Hafey, December 18, 1940.

23. M. Marcella Gill to H. J. Connolly, March 24, 1947.

24. H. J. Connolly to M. Marcella Gill, April 2, 1947.

25. M. Marcella Gill to H. J. Connolly, June 12, 1947.

26. H. J. Connolly to M. Marcella Gill, July 28, 1947.

27. M. Marcella Gill to H. J. Connolly, July 31, 1947.

28. Yarina, *Marywood College*, 86–87.

29. H. D., "Eurydice," I 1. Subsequent references to the poem are cited from this edition by stanza and line number.

30. "In 1869 . . . homes": "Sunken Coal Mine," *New York Times*, December 20, 1869, http://query.nytimes.com/gst/abstract.html?res=9B05E6DF133BE63BBC4851DFB4678382679FDE&legacy=true; "In Alberta . . . 237": Ellis Roberts, "History," 5; "In 1916 . . . killed 7": "Own Pillars but Cave-in Wrecks Homes," *Scranton Republican*, December 19, 1916; "In January 1925 . . . 6": "Four-Year-Old Boy Crushed under Tons of Concrete Wall While Playing in Home Yard," *Scranton Times*, May 13, 1927.

31. "A seven-year-old . . . cave hole": "Forest City Boy Is Drowned in Cave-Hole," *Scranton Truth*, April 4, 1910; "In August 1919 . . . 'King Coal' ": "Four-Year-Old"; "In 1935 . . . children": Ellis Roberts, "History," 97, 98; "In Scranton . . . 'shaft' ": Ellis Roberts, *Breaker*, 141. The Glen Alden general manager was acquitted.

32. "In 1879 . . . Shenandoah": Aurand, *Coalcracker Culture*, 30; "In 1911 . . . mine": 31; "In 1917 . . . beneath it": "Unenviable Publicity," *Wilkes-Barre Record*, February 27, 1917, https://www.newspapers.com/image/93951633/; "In 1940 . . . dollars": Ellis Roberts, "History," 76. *Philadelphia Press* ran a series of articles about mine subsidence in late February 1917.

33. "One night . . . twisted": "Street over Mine Caves In"; "In November 1937 . . . prior settling": "Five South Side Homes Damaged by Settling," *Scranton Times*, November 10, 1937; "in July 1938 . . . 'are made' ": "Mine Cave Damages Five Homes," *Scranton Times*, July 6, 1938. Cedar Avenue was the scene of a mine fire in the mid-1960s. See chapter 3.

34. "Near Pittston . . . trainmen": "Engine Plunges into Cave Hole Killing 2 Men," *Scranton Times*, July 14, 1909; "In April 1911 . . . saved": "Horse Drowns in Cave Hole," *Pittston Gazette*, April 7, 1911, https://www.newspapers.com/image/53718080/?terms=%E2%80%9CHorse%2BDrowns%2Bin%2BCave%2BHole%2C%E2%80%9D%2BPittston%2BGazette%2C; "A subsidence . . . 'books' ": "Building Endangered, Horse and Wagon Were Engulfed in Big Cave," *Scranton Times*, February 8, 1913; "A Scranton cave-in . . . Church": "Believe Mine Settling Caused Church Fire; Structure Destroyed," *Scranton Times*, January 19, 1914; "In 1926 . . . abyss": Ellis Roberts, "History," 75; "In 1943 . . . cave": 62; "A Girardville . . . 'graveyard' ": "Business Undermined," *Harrisburg Telegraph*, August 17, 1944, https://www.newspapers.com/image/43109731.

35. "Cave-ins . . . askew": Aurand, *Coalcracker Culture*, 31; "My city . . . trees": "Trees Destroyed Will Be Replaced by Firm," *Scranton Times*, August 29, 1935.

36. "Cave Protected House Invented by Friedman," *Scranton Times*, November 12, 1930.

37. "In 1916 . . . underlying coal": "Own Pillars"; "In 1919 . . . Library": "Has Ceased Mining beneath the Scranton Public Library," *Scranton Times*, October 25, 1919; "Although Ashley . . . vehicles": Ellis Roberts, "History," 93.

38. "In 1921 . . . 'beneath' ": Mattes, *Exhibits*; "sixteen years . . . cemetery": "Cemetery Caved; Court Action Is to Be Instituted," *Scranton Times*, April 14, 1937; "Fearing . . . reasons": "Throop Burgess Gives Order to Close Mining Operation," *Scranton Times*, April 22, 1937. More than one grave may have been disturbed. A borough official "charged that reckless mining . . . exposed bodies and rough boxes in the Throop Slovak cemetery" ("Throop Burgess").

39. "Twin Shaft Disaster," *Reports,* 79, 80.

40. "100 Miners Entombed," *New York Times,* June 29, 1896, http://query.nytimes.com/gst/abstract.html?res=9B00EEDF1638E033A2575AC2A9609C94679ED7CF&legacy=true.

41. "Twin Shaft Disaster," *Reports,* 79.

42. "100 Miners."

43. "Twin Shaft Disaster," *Reports,* 80, 81.

44. Ibid., 81.

45. Ibid., 84.

46. Ellis Roberts, *Breaker,* 44.

47. Wolensky, Wolensky, and Wolensky, *Knox,* 69.

48. Ellis Roberts, *Breaker,* 43.

49. Dante, *Inferno,* 11. Subsequent references to the poem are cited from this edition by line number. All references here are from canto XII.

50. "During first mining . . . surface": Griffith and Conner, *Mining Conditions,* 16; "no one . . . the other": 17; "pillar robbing . . . coal": Wolensky and Hastie, *Anthracite Labor Wars,* 376.

51. Wolensky and Hastie, *Anthracite Labor Wars,* 185, 189.

52. Ellis Roberts, "History," 161.

53. W. H. Williams, *Mine Cave Problems,* 20.

54. "They urged . . . greed": Mattes, *Exhibits*; "cut-throat waivers": Mattes, "Mine-Cave Struggle," 369; "first written . . . caving": W. H. Williams, *Mine Cave Problems,* 17. Ellis Roberts noted in 1948 that the "few attempts to rally the people into effective protesting organizations have failed. There have been no collective court actions. Joint suits of persons injured by subsidence have never been originated" ("History," 109).

55. "The first . . . 1911": Ellis Roberts, "History," 111; "Two years . . . cave-ins": Fischel, *Regulatory Takings,* 32; "empowered . . . workings": Roberts, 112; "formed . . . Support": Cheryl Kashuba, "Scranton Takes on Mining, Cave-Ins," *Scranton Sunday Times,* October 10, 2010; "Although . . . Court": Mattes, "Mine-Cave Struggle," 373. Courts declared the Davis Act unconstitutional (Wolensky and Hastie, *Anthracite Labor Wars,* 42).

56. Richard J. Beamish, "Mine Cave-Ins Threaten Ruin of Coal Region," *Philadelphia Press,* February 26, 1917.

57. Ellis Roberts, "History," 90.

58. "absolute ignorance": ibid., 18; "flooded . . . left": 19; "engineers . . . 'ground' ": 6.

59. "few . . . clippings": Fischel, *Regulatory Takings,* 26; "A prominent . . . issue": 25.

60. "Scranton . . . Support": Mattes, "Mine-Cave Struggle," 372; "state . . . plank": "Pennsylvania Politics," 46; "state legislature . . . support": Mattes, 376–377. Wolensky and Hastie note that mine subsidence was a "hotly contested regional issue" (41).

61. "Silence . . . life": Ellis Roberts, "History," 42, 46, 62, 63, 173, 191; "Shouldering . . . mining": 109; "after . . . 'this area' ": Reynolds, "Life amid the Perils of Pittston."

62. Ellis Roberts, "History," 142.

63. "The Vale of Lackawanna" appears on page 6 of Weyburn, *A Story of Lackawanna County.* The poem "Roaring Brook" appears on page 19. References below to both poems are cited by line number; references to the history are cited by page number.

64. Mattes, "Mine-Cave Struggle," 369.

65. An origin-story factor: geology. Eons ago, land subsidence formed the Lackawanna Valley. A boat-shaped basin, the valley opened when subsurface salt deposits dissolved, causing the surface collapse (Harrison, Marshak, and McBride, 1510). Long and narrow, the resulting valley had steep sides that later afforded few construction sites. Coal deposits ended up under the valley floor, where people had to live.

66. Scranton et al. v. Phillips et al. Subsequent references are cited by page number. Philip Mattes described the opinion in 1928 as the "Dred Scott Decision of the coal industry" ("Mine-Cave Struggle," 370).

67. Fischel, *Regulatory Takings*, 31; and Mattes, "Mine-Cave Struggle," 371.

68. "Pillar Robbing Caused Big Cave-In: $100,000 Damage," *Scranton Times*, August 30, 1909.

69. Penman v. Jones, 1044. Subsequent references are cited from this document by page number.

70. Mattes, "Mine-Cave Struggle," 374.

71. Fischel, *Regulatory Takings*, 33.

72. "Scranton activists . . . Acts": Fischel, *Regulatory Takings*, 15–16, 33; "Kohler . . . damage": Friedman, "Search for Seizure," 21; "If . . . Kohler Act": 21; and Fischel, 33; "In effect . . . waiver": Fischel, 33.

73. Wolensky and Hastie, *Anthracite Labor Wars*, 42. Before breaking ground, the sisters contacted the Scranton Mine Cave Commission to learn the details of mine conditions under the college; commission secretary Tudor Williams responded with a description of each coal vein (Tudor Williams to M. Casimir Murray, April 13, 1921).

74. Freyfogle, *Land We Share*, 84.

75. Wolensky and Hastie, *Anthracite Labor Wars*, 42.

76. Plato, *Republic*, 514a. Subsequent references are cited from this edition by Stephanus pagination.

77. The state marker about Lackawanna County, which is in the heart of Scranton, on Courthouse Square, describes the city as the "anthracite coal mining capital of the world."

78. "president . . . 'here' ": "Property Owners Start Repairs in Cave-in Zone," *Scranton Times*, August 31, 1909; "Scranton Mine . . . 'the city' ": "Scranton Is Not an Unsafe City," *Scranton Truth*, April 23, 1913; "In 1919 . . . 'Association' ": Langan, "Scranton, PA," 304.

79. "1913 . . . 'into' ": Cushing, "Near-Doomed Cities," 660; "people's . . . 'suffragettes' ": Hitchcock, *History of Scranton*, 1:68; "1912 . . . Canal": Griffith and Conner, *Mining Conditions*, 9.

80. William La Fontaine to Philip V. Mattes, June 10, 1927.

81. Aurand, *Coalcracker Culture*, 117–118.

82. "stepping off . . . 'basic industry' ": "Anthracite on Parade Is Stirring Spectacle," *Scranton Times*, October 8, 1937; "*Scranton Times* . . . 'Anthracite Week' ": "Loyal to Anthracite," editorial, *Scranton Times*, October 8, 1937; "just as . . . to fall": "Anthracite on Parade."

83. Kelley, " Hollow City," 2–3. Subsequent references to the poem are cited from this edition by line number.

84. Folsom, *Urban Capitalists*, 62.

85. Crane, "In the Depths of a Coal Mine," 206.

86. Wolensky, Wolensky, and Wolensky, *Knox*, 79n4.

87. Emily Schmall and Justin Juozapavicius, “Earthquakes Surge in States with Fracking,” *Scranton Times-Tribune*, July 15, 2014.

88. “In 1864 . . . destruction”: Roger J. Howell to Anthracite Subsidence Commission; “European . . . ‘auxiliary’ ”: Ellis Roberts, “History,” 8; “Early on . . . sit”: Wolensky and Hastie, *Anthracite Labor Wars*, 254n64.

89. “To flush . . . $15 million”: “Flushing Survey Completed by Government’s Engineers,” *Scranton Times*, July 15, 1938; “In 1942 . . . $50 million”: Brown et al. to Anthracite Subsidence Commission, September 25, 1942; “Federal . . . million”: “Clark Hopeful for Mine Bill,” *Scranton Times*, August 10, 1962; “The city . . . ‘and safety’ ”: Zwartendyk, “Economic Aspects,” 216; “Operation Backfill . . . Plymouth”: *Story of Operation Backfill*, 16. For an example of a flushing project, see “$1.25 Million Flushing Job OK’d for Tripp Park Area,” *Scranton Times*, April 8, 1964.

90. “To fill . . . ‘protected’ ”: Keenan, *Sisters, Servants*, 78; “Warned . . . ‘scale’ ”: 79; “Over . . . danger”: 105; “through 1937 . . . ‘executives’ ”: 79.

91. “contract . . . dome”: ibid., 105. See letters of J. Rossa McCormick to Bishop Thomas C. O’Reilly, 1932–1937, IHM Archives. See also several mining-related letters listed in the references of Keenan, *Sisters, Servants*, 169.

92. “In 1940 . . . ‘pillars’ ”: Keenan, *Sisters, Servants*, 233; “In May . . . ‘underground’ ”: 234; “One company . . . land”: 238.

93. T. L. Wackley to Joseph G. Keating, June 13, 1951.

94. Philbin, *Marywood University Parking Lot Subsidence II*.

95. David Falchek, “Gaping Hole Limits Traffic,” *Scranton Times-Tribune*, February 6, 2014.

96. “In September . . . support”: William J. Bassett, “12th Building in 7 Years Is Dedicated by U of S,” *Scranton Times*, September 17, 1962; “St. Thomas . . . project”: “St. Thomas Hall,” University of Scranton, 2013, http://digitalservices.scranton.edu/cdm/buildingtemplate/collection/p9000coll7/?page=79; see also “115 Years Since Old Mine Drift Was Closed,” *Scranton Times*, May 24, 1961; “Colorado School of Mines”: “Case Histories,” see “Case History 5: Colorado School of Mines, Golden CO—a History of Subsidence,” *Colorado Geological Survey*, http://coloradogeologicalsurvey.org/geologic-hazards/subsidence-mine/case-histories/.

97. Homer, *Odyssey*, book 11, 159. References to the epic are cited from this edition by page number.

Chapter 7 · Burying Books

1. *Marywood Catalog*, 12–17.

2. “read . . . she reads”: ibid., 12; “greater . . . allusions”: 16; “foster . . . literature”: 12.

3. “Fiction . . . motherhouse”: *Marywood Quarterly*, 56, Gillespie, *Sisters of the I.H.M.*, 405–406, and Yarina, *Marywood College*, 26; “student . . . below”: 42–43.

4. “In 1951 . . . new one”: M. Kathleen Hart to Jerome D. Hannan, July 7, 1960; “Ten years . . . project”: M. Kathleen Hart to Jerome D. Hannan, September 23, 1961; “On the same . . . shelving”: Keenan, *Sisters, Servants*, 347.

5. O’Connor, “Physical Expansion,” 25–26.

6. Eco, *Name of the Rose*. References to the novel are cited from this edition by page number.

7. Haft, White, and White, *Key to "The Name of the Rose,"* 76.

8. "Executive Summary," ix.

9. Gioia, *Reading on the Rise,* 2.

10. Sandra Emerson, "Graphic Novel Course at Crafton Hills College to Get Disclaimer Following Complaints by Student, Her Parents," *Redlands Daily Facts,* June 15, 2015, http://www.redlandsdailyfacts.com/social-affairs/20150615/graphic-novel-course-at-crafton-hills-college-to-get-disclaimer-following-complaints-by-student-her-parents.

11. Scott Jaschik, "Trigger Warning Defused," *Inside Higher Ed,* July 9, 2015, https://www.insidehighered.com/news/2015/07/09/college-drops-agreement-add-trigger-warning-syllabus-based-one-familys-protest.

12. "When Leo . . . 'writings' ": Cadegan, *All Good Books,* 92; "The church . . . Books": 94; "Although . . . ideas": 87; "Books by . . . 1966": 86, 108.

13. "Censoring . . . heretics": Brian Cummings, "Book as Symbol," 95; "In fifth-century . . . books": Raven, "Resonances of Loss," 16; "In 1415 . . . waist": Cummings, 95.

14. "In 2012 . . . School": Laurie Goodstein and Rachel Donadio, "Vatican Scolds Nun for Book on Sexuality," *New York Times,* June 4, 2012, http://www.nytimes.com/2012/06/05/us/sister-margaret-farley-denounced-by-vatican.html?_r=0; "*America* . . . 'exploitation' ": Cahill, "Patterns of Relationship"; "The Vatican . . . homosexuality": Goodstein and Donadio.

15. "To 'destroy' . . . alive": Battles, *Library,* 32, 33; "In 1933 . . . Germany": 164; "Nazis . . . Jews": Raven, "Resonances of Loss," 23; "prophecy . . . 'men' ": Battles, 156; "After . . . China": Knuth, "China's Destruction," 253; "Observers . . . 'documents' ": 255.

16. "During World . . . Louvain": Battles, *Library,* 159, 161; "During the Bosnian . . . books": 185; "In the 1990s . . . Library": Raven, "Resonances of Loss," 24; "In 2015 . . . students": Sinan Salaheddin and Sameer N. Yacoub, "Iraqi Libraries Ransacked by Islamic State Group in Mosul," *AP Top News Package,* January 31, 2015, https://www.yahoo.com/news/iraqi-libraries-ransacked-islamic-state-group-mosul-070110723.html?ref=gs. Mosul had experienced similar destruction before. After capturing the city in 1258, Mongols tossed books into the Tigris River (Salaheddin and Yacoub). In 2003, looters took advantage of the chaos of the US invasion to grab what they could from Mosul cultural sites, including libraries (Brian Murphy, "Mosul Descending into Anarchy after Defenders Vanish," *Pittsburgh Post-Gazette,* April 12, 2003, http://old.post-gazette.com/World/20030412mosulwp5.asp).

17. Lerner, *Story of Libraries,* 72.

18. *Oxford English Dictionary,* 2nd ed., s.v. "book," see note in word origin.

19. "Originator . . . librarianship": Conner, *New University Library,* 51; "Melvil . . . choices": Battles, *Library,* 145; "He argued . . . 'patrons' ": Conner, 12; "the ALA . . . 'patrons' ": Battles, 144; "Promethean . . . mankind": 145; "librarians have . . . 'button' ": Conner, 26–27.

20. "adapt or die": Conner, *New University Library,* 3; "Fewer . . . mid-1990s": 38; "Although . . . needs": 31; "Requiring . . . costs": 32.

21. "perhaps because . . . print": ibid., 32; "Technology may . . . 'collections' ": 33–34.

22. "digging . . . materials": Mike Ives, "Boom in Mining Rare Earths Poses Mounting Toxic Risks," *Environment360,* http://e360.yale.edu/feature/boom_in_mining_rare_earths_poses_mounting_toxic_risks/2614/; and Kiddee, Naidu, and Wong, "Electronic Waste

Management," 1238; "labor-intensive . . . poison people": Ives; "dealing with . . . health problems": Kiddee, Naidu, and Wong, 1238; "in 2008 . . . to buyer": Joe Hutsko, "Are E-readers Greener Than Books?" *New York Times, Green: Energy, the Environment and the Bottom Line* (blog), August 31, 2009, http://green.blogs.nytimes.com/2009/08/31/are-e-readers-greener-than-books/.

23. "Medieval . . . a book": Bennett, "Libraries and Learning," 182; "In the late nineteenth . . . margins": 185; "In the late twentieth . . . 'learning-centered' library": 187.

24. Conner, *New University Library*, 40.

25. According to a local news article, the university built the library to answer "several years of poor rankings by the Princeton Review. In 2011, the company ranked the university as having the 20th-worst college library in the nation" (Sarah Hofius Hall, "Marywood's New Library to Go Well beyond Books," *Scranton Times-Tribune*, November 28, 2012).

26. J. Rossa McCormick to M. Marcella Gill, April 14, 1947.

27. "Learning Commons FAQs," undated information sheet from Marketing and Communications Department, Marywood University.

28. "21st Century library": "Learning Commons FAQs"; "change minds . . . to do": Sochoka, "Bold Vision," 11; "It's not just a library": Hall, "Marywood's New Library"; "advanced interactive tools": "Learning Commons Features," Marywood University, http://100.marywood.edu/priorities/commons/learning-commons-features.html; "traditional": "Learning Commons FAQs"; "what was once the familiar library": "*The* Intellectual & Social Heart of Campus," *A Bold Heart*, Marywood University, http://100.marywood.edu/priorities/commons; "provide . . . students": ibid.; " 'improve[s]' . . . Center": "Learning Commons FAQs".

29. "environment . . . learning": "Intellectual & Social"; "creating . . . business ideas": "*The* Entrepreneur Launch Pad," *A Bold Heart*, Marywood University, http://100.marywood.edu/priorities/commons/entrepreneur-launch.html; "collaborative . . . Marketplace": "Learning Commons Features"; "*full-service . . . resource*": "Learning Commons FAQs."

30. Amanda Avery, interview by author, July 21, 2015.

31. Ibid. The Marywood collection: 190,000.

32. Lee Jamison, e-mail message to author and Amanda Avery, July 7, 2015.

33. "pushback from faculty": "Minutes of Learning Commons Design Team"; "some . . . browsing": Michael Mirabito, e-mail message to Cathy Schappert, June 12, 2011; "should have a presence": "Minutes of Learning Commons Design Team."

34. "far . . . information": "How Spaces Can Inspire Minds," *A Bold Heart*, Marywood University, http://100.marywood.edu/priorities/commons/learning-commons-features.html; "improved . . . books": "Learning Commons FAQs"; "visible . . . technology": "Learning Commons Features."

35. "books . . . history": "Learning Commons FAQs"; "continue . . . with you": ibid.; "more . . . books": ibid.; "ready . . . results": "Learning Commons Features."

36. Adams, *Education*, 379. Subsequent references to the autobiography are cited from this edition by page number.

37. "intellectual classes": "New York Public Library," 527; "hid . . . elevators": Battles, *Library*, 202; "librarians . . . readers": "New York Public Library," 527.

Conclusion

1. "Coal Bootleggers Tap Veins in 194 Places," *Scranton Times*, April 18, 1938.

2. "Bootlegging . . . fields": Adamic, "Great 'Bootleg' Coal Industry," para. 9; "In southern . . . access": Nelson, Barrett, and Ruck, *Steve Nelson*, 164; "A 1937 . . . anthracite": Pennsylvania Anthracite Coal Industry Commission, *Bootlegging*, 1, 2; "Bootleggers . . . New Jersey": Adamic, para. 1; "estimated . . . alone": Dublin and Licht, *Face of Decline*, 76; "Between . . . towns": Kozura, "We Stood Our Ground," 225.

3. "Most often . . . sales": Dublin and Licht, *Face of Decline*, 76; "In some . . . coal": Kozura, "We Stood Our Ground," 209; "Operating . . . months": Pennsylvania Anthracite Coal Industry Commission, *Bootlegging*, 2; "typical . . . coal": Flynn, "Bootleg Coal," 30; and Nelson, Barrett, and Ruck, *Steve Nelson*, 164; "As the . . . power": Dublin and Licht, 76.

4. "Coal Bootleggers."

5. "Bootleg Miners Are Arrested in North Scranton," *Scranton Times*, December 5, 1938.

6. "Bootleggers . . . families": Flynn, "Bootleg Coal," 34; "In response . . . 'we will' ": Dublin and Licht, *Face of Decline*, 80; "Others . . . 'water' ": Kozura, "We Stood Our Ground," 218. One bootleg leader pointed out, "On the ground that coal 'is the gift of nature' we contend that in the event of an emergency we have the right to earn a living" ("Freelance Miners to Ask State Coal Control," *Scranton Times*, September 17, 1937).

7. "Bootlegging . . . 1930s": Dublin and Licht, *Face of Decline*, 81; "Illegal . . . complained": Flynn, "Bootleg Coal," 34; "With more . . . efforts": Dublin and Licht, 81; "The next . . . forces": 81–82.

8. "one forester . . . Region": Silvius, "Forest Despoilers," 645; "pointing out . . . $2 million": 646; "In Centralia . . . blaze": Quigley, *Day the Earth Caved In*, 20; "When company . . . house": "Oxford Dispute Likely to End as Outcome of Meet," *Scranton Times*, July 15, 1938; "One South Sider . . . home": "Coal Bootleggers."

9. Bootleggers enjoyed so much public support in Northumberland County that the county court "refused to grant an injunction against illegal mining until ordered to do so by the Supreme Court of Pennsylvania" (Aurand, *Coalcracker Culture*, 113).

10. "Despite . . . support": Dublin and Licht, *Face of Decline*, 78; "Neighbors . . . 'unemployment' ": Aurand, *Coalcracker Culture*, 112; "in places . . . 30 percent": Dublin and Licht, 75; "Companies . . . convict": Aurand, 113; "Realizing . . . miners": Dublin and Licht, 79; "When . . . force": Flynn, "Bootleg Coal," 30; "Although . . . mines": Shea, "Digging in a Dog Hole," 19.

11. Blomain, "Dog Hole." References below to the poem are cited by line number.

12. *Merriam-Webster's Collegiate Dictionary*, 11th ed., s.v. "grief," see word origin.

13. Crane, "In the Depths," 203. Subsequent references to the essay are cited by page number.

14. "hotbed of mapping innovation": Nystrom, *Seeing Underground*, 11; "The 1869 act . . . boys": 59; "The disaster . . . boundary lines": 60; "A third . . . their mines": 63–64.

15. Ibid., 40.

16. Ibid., 29. R. P. Rothwell, Eckley B. Coxe, and Martin Corywell founded the American Institute of Mining Engineers in Wilkes-Barre in 1871 (*Fifteenth Anniversary*, 108).

17. Foster, *Pocketbook of Principles*, 46.

18. Young, "Mine Surveying."

19. Ibid. Eckley Coxe's first tape used thin steel that was meant for hoop skirts (Nystrom, *Seeing Underground*, 25).

20. "perfect picture": Nystrom, *Seeing Underground*, 42; "A 'record' . . . a map": Young, "Mine Surveying"; "similar to . . . final map": Nystrom, 27.

21. *Marywood Chronicle*, 40–41.

22. Dante, *Inferno*. References to the poem are cited by canto and line number.

23. Ovid, *Metamorphoses*, 1:139–140.

24. Foster, *Pocketbook of Principles*, 50.

25. Ibid., 75.

26. "brass bolt . . . New Jersey": Hitchcock, *History of Scranton*, 1:478; "companies . . . slush": Griffen, "Slush Problem," 518; "mixture . . . coal": 514.

27. Nystrom, *Seeing Underground*, 60.

28. Foster, *Pocketbook of Principles*, 75–76.

29. "In 1891 . . . alive": Miller and Sharpless, *Kingdom of Coal*, 112–113; "Improperly . . . field": Wolensky, Wolensky, and Wolensky, *Knox*, 75; "In 2002 . . . workings": Nystrom, *Seeing Underground*, 27.

30. "Investigation Continued," *Pittston Gazette*, July 17, 1896.

31. "The Twin Shaft Disaster," *Colliery*, 17.

32. "Report of Twin Commission," *Pittston Gazette*, October 2, 1896.

33. Jessica Shankleman, "Germany Just Got Almost All of Its Power from Renewable Energy," *Bloomberg*, May 16, 2016, http://www.bloomberg.com/news/articles/2016-05-16/germany-just-got-almost-all-of-its-power-from-renewable-energy.

34. Brian Cummings, "Book as Symbol," 96.

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